

1-1-1891

Collection Book 1891

Cyrus Guernsey Pringle

Follow this and additional works at: <http://scholarworks.uvm.edu/cpringle>

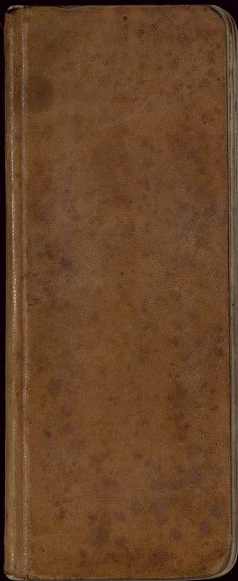


Part of the [Botany Commons](#)

Recommended Citation

Pringle, Cyrus Guernsey, "Collection Book 1891" (1891). *Cyrus Pringle Collection Notebooks*. Book 7.
<http://scholarworks.uvm.edu/cpringle/7>

This Article is brought to you for free and open access by the Pringle Herbarium at ScholarWorks @ UVM. It has been accepted for inclusion in Cyrus Pringle Collection Notebooks by an authorized administrator of ScholarWorks @ UVM. For more information, please contact donna.omalley@uvm.edu.



C. C. Pringle,
Charlotte,
Vermont,
E. U. A.

Collector in Botany
for
Harvard University,
Smithsonian Institution,
British Museum,
etc.

Charlotte, Vermont,

5th, May, 1891.

Once more I tear myself away from home and friends — the saddest thing about it the leaving of my dear mother — and at 4.07, P.M., take train bound on another Mexican journey, ticketing to Laredo, Texas, via Montreal, Detroit, and St. Louis, Judd A. Williams accompanying as assistant.

Though the maples are in flower and the fields are getting green, a cold north wind brings light snow squalls throughout the day —

6, May.

A cold night succeeds the cold day, and we only keep warm by wrapping ourselves in our blankets, as

we ride from Wapiti
to Fort Hope.

It is a much
warmer day. Some
time before sundown
we reach Selkirk and
change to the Hebberich
railroad.

7th, May.

Morning consists in
spending over the prairies of
Illinois, a clear morning.

According to a party of night
we early reach St. Louis,
and spend the day at the
Missouri Botanical Garden
chiefly with corium and
Horofort, planting a wild
garden here.

At 8.00 P. M. we proceed
on our way by the Iron
Mountain railroad.

8th, May.

Our way by the Highland
from St. Louis to St. Paul
Kansas, not far from St. Paul.

At Palustian, Texas, our
train is held for four or
five hours of the night
by a derailed freight
train a little way to the
south.

9th, May.

A pleasant day just com-
fortably warm, while we
are whirled over the
plains of Texas which
are gay with Lupinus,
Gaillardia, Coreopsis, Drum-
mondii, Euphorbia,
pinatifida, Helios, etc.

We find in Passo at 9.00
P. M. the Mex. National
train awaiting the arrival
of ours and proceed at
once across the river.

In the Mexican custom
house I find as command-
ante my old acquaintance
who was long commandante
at Paso del Norte, and
he, remembering me,

permits me to pass
without trouble or expense.

10, May.

We leave our train at
Carmenas about 9.00
A. M. to botanize in that
vicinity, and collect
flowering specimens of
Acacia glandulifera, Watson
Mimosa gypsophylla, Kunth³⁶⁹⁷
Cnecus microphylla, Xce
Cnecus n. sp.?

11, May.

Rising at daylight from
our bed spread on the
grass near the station
we have time before the
coming of the train to
collect flowers and leaves of
Yucca australis, D. R. S. ³⁶⁹¹²

A warm and dusty ride
follows, and we are
brought about 5.00 P. M.
to San Luis Potosi.

At the depot we meet
Rev. M. E. Beall and
he stays by me till, having
found my old quarters
at Mr. Beall of ey's occupied
he has helped us to settle
in an upper room of
his church property, for-
merly a convent. Our
room, lofty and long, and
lighted by an octagonal
window high in one end,
was more recently used
as a Masonic hall.

12, May.

We get our trunks from
the depot and bring to our
room those left last
fall in Mr. Beall's house,
clean the dust out of
our quarters - a dread-
ful task - and then
attend to the drying of
our plants on the house-
tops close by our room.
In the evening I call

on Mr. Grimes and
his family in their
new home not far
away -

13 May -

we go by train to Bocas
and collect

³⁷⁰⁵
Irene Schaffner, Watson
³⁷⁴⁹
Cereus promitragans, Mart.

14 May.

Failing yesterday to find
in flower

⁵⁰⁶⁹
Zephyranthes concolor, B. & H.

so soon is its flowering
over - we had seen
flowers but two days
before - we return to
Bocas, walk back along
the railroad some five
miles, and secure our
complement of this plant
- 60 specimens in flower.

15 May.

I go by Mex. National
train to the station of Los
Charcos far to the north
and secure flowering spec^{im} of
³⁷⁴² *Zephyranthes verecunda*,
Nob. ~~sub.~~
even as we came into the
country, also in fl. and fr.
~~specimens of *Stylidium* and *Epiphyllum*~~
Gyphospermum ~~latifolium~~, Watson.
Dr. Barroeta calls at our
room in the afternoon.

16 May.

We stay at home and
dry and arrange plants.

17 May.

We give some needed
attention to our plants, write
letters; and attend the
service in the English chapel,
hearing the younger Wallace of
Zacatecas preach.

18 May.

at 7.30 A. M. we take

the Mex. Cent. train and
ride via Aguas Calientes
to Silao, where we take
a room for the night, and
in which not a flea
disturbs our slumbers -

19 May.

Rising at daybreak we
walk northward from the
station some 40 minutes
to collect a plant seen
from the train in approaching
Silao.

³⁷¹⁷
Lupinus bilineatus, Benth.

At 7.45 A.M. we go on
via Irapuato for Guadalupe
where we arrive at 5:00 P.M.
and find a welcome in the
house of the Howlands.

All the country between
San Luis Potosi and Guadalupe
was found to be
dry, brown, and hot.

This is the season of the
wheat harvest, and
the valleys traversed

were covered for the
most part with fields of
ripe wheat standing erect
and bright under the
hot sun. There was much
smoke from burning hill-
sides in the air, making
the distant mountain lines
appear hazy.

Most of the cattle seen
were sleek, often fat; to us
it was a marvel that they
could subsist on the meagre
brown herbage of the fields.
20 May.

We walk early towards
the barranca, and about its
 verge collect ³⁷¹⁸ -

Folstera tomentosa Watson
Agave yuccaefolia, DC. 3740

I was disappointed to find
the winter blooming species
Agratum calloun Watson n. sp.
and *Muhlenbergia brevifolia*
Scribn. n. sp. already past
collecting by reason of

The unusual drought and
heat of the season.

21, May.

Leaving Judd to dry plants
I go via Atamejac to hills
some three miles away, and
am rewarded for a hard
march in the heat by
finding plenty of flowering
specimens (with some fruit) of
³⁷¹⁹*Bougainvillea multiflora*, Watson.

Returned at nightfall &
find Judd prostrated with
an attack of malarial
fever.

22 May.

Judd being quite sick
I stay at home, attend upon
him, and dry plants.

23, May.

Judd being better, I leave
him to the kind care of
the good people of the
house, and go to the
baranca verge collect-
ing.

³⁷¹⁴*Aristolochia Guadalupeana*
³⁷¹⁵*Xylopia velutina*, Watson & Pl.

24 May

Spent the day in the mission
house reading and resting.

25 May.

Judd being too sick to
go out, I go towards the
baranca and secure
³⁷¹⁶*Eriosema pulchellum*, Son.
³⁷¹⁷*Hirandia Kunthii*, Choisy.

26, May.

I go to the hills about
Rio Blanco and collect
flowering specimens of ³⁷¹⁸*Calliandra nitida*, Watson
³⁷¹⁹*Ximelia parviflora*, Kunth.
³⁷²⁰*Eupatorium pectinatum*, Robinson.

27 May.

I return to the same field
to collect ³⁷²¹*Eupatorium pectinatum*, Robinson.

28 May.

Judd sufficiently recovered from his sickness to go with me to the depths of the barranca and gather 3712

Plumeria Mexicana, Lodd

The heat in the barranca was found to be quite tropical: on the plains 1500 feet higher the heat is greatly moderated by cool breezes.

29 May.

Taking the train at 9.15 A.M. we ride some four hours and stop at Yuracuerero. Thence we walk on about four miles to the pass of Monte Leon, a region of volcanic hills which are covered with a low forest growth.

We collect in flower 3732
Lysotoma microphylla, Bth.
and then spread our

blanket on the dry warm earth under the little trees and pass a serene night.

30 May.

Early awakening we collect while the morning air is soft and cool and filled with the notes of birds.

3731
Cassia polyantha, Moc. & S.
Eysenhardtia multiflora, Kling.
Mimosa monacantha, Bth.

and then return to the station and await train for Michoacán.

31 May.

Rested, read, and gave some attention to our plants.

1. June.

We dried plants and made preparations for returning to San Luis Potosí.

Mr. Rudolph Abelt

with his wife (Calle de
La Parascas, 85-) called
to talk about plants. He
told me much about the
Colima region and others.

I called on Rev. Mr.
Wilson of the Baptist
Mission.

Showers in the afternoon

2, June -

Having collected such
desirable species as were
accessible in the vicinity of
Guadalajara - about a
thousand specimens -
we leave the region, now
unusually hot and dry,
to become refreshed by
the gathering rains which
we shall find elsewhere -
As we travelled towards
Tlapacotal, showers fell in
various quarters, cooling
the air.

3, June -

Coming by way of Celaya
we reach San Luis at 9.00
A. M.

Heavy rains in our ab-
sence have damaged some
of our plants left exposed
to the sun. We find our
quarters disgustingly dusty
and grim.

I hunt for another
room, calling on friends
to put myself in the way
of advice.

Very tired from ^{having} spent a
night on the road.

4, June -

We move into pleasant
and very convenient
quarters in the Hotel del
Jardin.

I write letters and
prepare for a trip.

5, June -

At 12.15 A. M. we take Tampico train and are let off about mid-way in Tamasopo Cañon.

There we collect
Oreton ³⁶⁹⁶ *Panamensis*, *Mull. Arg., v.*
Maurandia ³⁷⁰⁴ *erubescens*, L.
Christia ³⁷⁰⁹ *littoralis*, DC.

The cañon is full of clouds and mists and showers, which much hinder our collecting.

When night comes on we lie down in our rubber coats in a cove amongst ledges placing our heads in the shelter of an overhanging cliff. A smart shower comes on before mid-night, but we keep dry and warm, and rest pretty well.

6, June -

We rise as soon as we can see to move about in safety - dense fogs fill the cañon still -

We collect
Derris ³⁷²¹ *seppiana*, Desv.
and several species in incomplete lots, as we make our way to Canoas station to take the returning train.

7, June -

We dry plants and I attend Mr. Winton's preaching at 3.00 P.M.

8, June -

Still we work over our plants.

And prepare to go out on another trip.

9 June -

We alight from the train again in Tamasopo Cañon and at the water car and work back to Canoas station to sleep under the great Cypress trees collecting on the way.

Phyllanthus ³⁷⁰⁸ *acuminatus*, Benth.
Calliandra ³⁷²² *Portoricensis*, Benth.
Hectandra ³⁷²⁵ *sanguinea*, Rottb.

No rain.

10, June. Wed.

Again no rain.

We collect

Eryngium ³⁶⁹⁸ *Watsoni*, C. & R. n. sp.
Piper ³⁶⁹⁹ *auritum*, Kunth.
Zephyranthes ³⁷³⁵ *Lindleyana*, ^{Herb.} Lindl.
Tillandsia ³⁷³⁸ *detriculata*, L.

11, June.

We are at our hotel in San Luis drying plants.

12 June -

We ride towards Tampico till 2.00 P.M., then alight at Tancinil station and walk thence to Las Palmas station collecting.

Mimosa ³⁷⁶⁰ *leucanoides*, Benth.
Piper ³⁷⁵¹ *Berlandieri*, C. & C.

Arrived near Las Palmas after dark, we select a level plot of ground, cover it with boughs and our rubber blanket, then lie down in our rubber coats. No rain falling we pass a comfortable night.

13, June.

We make the most of the morning, before the return of the train at 9.35 to collect.
Acacia ³⁶⁹¹ *spadicigera*, Ch. & Sch.
Bignonia ³⁶⁹² *diversifolia*, HBK.
Clouds obscured the sun; yet the air was

oppressively hot and humid, so that we were glad to turn back towards the tableland.

14, June.

We give due attention to our plants, and in the afternoon attend Mr. Winson's preaching.

15 June -

I write to Sister A. Stalk, asking him to join us.

Our plants engage our close attention -

Much hot sunshine, with showers on the mountains -

16 June -

Shortly after leaving San Luis by the Tampico train our engine becomes partly disabled; conse-

quently it is midday when we alight half way down Tamassopo canyon. We found the canyon full of mists which wet and darkened the woods so we had to give up our plan of collecting ferns. Keeping to the railroad track and banks we collected, as we walked back to Las Canoas, ³⁷¹⁵ *Oreoc. Mexicanus*, Hensl.

Then at nightfall, after having taken a bath, we spread our bed under the friendly Cypress trees and slept well.

17, June.

While Judd digs bulbs of *Zephyranthes Lindleyana*, I collect -

Cyperus ³⁷²⁴ *ochraceus*, Vahl.
Cyperus ³⁷¹⁶ *luzula*, Rottb.
Burchardia ³⁷³⁶ *Pinglii*, Watson

We enjoy a pleasant day
and welcome the re-
turning train, which
comes on time -

18, June -

Closely occupied
drying our plants, so as to
return by next train.

19, June -

We leave the Pacific
train at Canoa station -
while Judd dips Zephyran-
thes bulbs, I collect flowers.

³⁷²⁷
Xylosma Simplex Rob.
³⁷⁰⁶
Erismaria concolor, Ch. Koch.

then in the barranca a mile
west of the station find of
³⁷⁴⁶
Saylison Whulsi, Watson -
a shrub with red fls.

a pleasant and warm
day -

20, June -

We arise early from our bed
under the Cypress trees. Judd
turns again to dipping bulbs,
and I return to the bar-
ranca and collect in the
rich bottom a tiny grass
Eragrostis ³⁶⁹⁹ *reptans*, Nees.

and on its sides a tree
belonging to the *Urticaceae*
Spondopanax ³⁷²³ *arborescens*.

Before leaving our camp,
however, we finish our com-
plement of -

³⁷⁴⁸
Opuntia decaphylla, HBK. - ?

Another day of warm bright
sunshine.

The wrecking of a freight
train below Las Con makes
our train move than an
hour and a half later and
we only reach San Luis
about 1.30 A.M. -

21 June.

Mr. Ball preached a perfect

summon in behalf of
foreign missions -
We had good sunshine
for drying plants -

22, June -

Bright sunshine but
cool breezes -

I called at Mr. Grimes
and Dr. Barroeta's, where
consulting his library, I
learn with pleasure
that my no. 3537, *Chama-
edorea Pringlei* Watson
n. sp. is among the
Palmae -

23 June -

Alighting from the Pan-
pico train at Las Canoas we
enter the barranca and on
its shady bluffs pursue the
new path

Chamaedorea Pringlei, Watson
and a composite
Zamia fasciculata Gray.

Only very slight showers
fall: and at night we
lie dry under the cypress
trees.

24 June -

Judd makes specimens
of

³⁷³⁹
Agave Cylindrica, Hook

³⁷⁴¹
Pilea glabra, Watson

I collect, searching the hills
far and near

³⁷⁰⁰
Bomarea Mexicana, Mill

and flowering specimens of
³⁷³⁴
Eitharexylon Berlandieri, Rob.

to replace the poor ones
distributed last year.

The train comes on time -
a bright and breezy day
follows a few slight showers
of the early morning -

25 June -

We are at our hotel im-
proving a good day for
drying our plants.

[illegible]

Paspalum vaginatum, Swartz.
Hierona nervosa, Bahl?
Hierona simplex, Bahl?
Paspalum vaginatum, Swartz.

The railroad comes from
north-eastward to the
point where we are going. The
line itself, most typical
as a whole, is bordered
by a stretch
richly provided of *Echinops*
and other species which
are thrifty shrubs of
Atriplex and *Suaeda* and
other saline plants.

At dawn, we awoke at our sub-
sistence station on a mountain bare
except, every inch, with
an impenetrable crust, and
amidst the desert solitude
were lulled to sleep
by the chirping of a few
the only insects.

27 Jan. 1862
As soon as daylight
begins to appear the
G. Schenaria setiiflora, Rose.
Gymnoloma caucensis, Rob.
Gissolapis suadaphia, Rob.
u. gen.

Then returning to the station we gather ³⁷⁸⁷
Rorrichia frutescens, DC.
³⁷⁸⁸
Aldoulandia Pringlei Rob. & G.

and at dark board the home bound train.

Two bright breezy days have favored this trip.

28, June -

We dry plants and rest, and I attend Mr. Winton's meeting.

29 June -

While Judd is busy drying plants, I arrange my collection and fill two trunks preparatory to making a shipment.

Another dry breezy day.

30, June -

I did not awake last night in time to get the Tampico train, but

did not much regret it; for I need rest from continuous exhaustive travel, and I need to take medicine.

But little sunshine favors our drying of plants.

1, July -

Taking the north bound train of the Mex. National at 10:40 A. M. we rode to Los Charcos station by 1:09 P.M.

And on the plains near by collected in fruit ³⁷⁸⁹
Citharexylum brachyanthum, Gray.
Showers trailed over the eastern hills and sprinkled the plain, and we had to seek cover under our rubber. Showers continuing into the night we selected and prepared our bed with care, choosing the shelter of a mesquite bush

and ground a trifle elevated. We got only slightly wet and a little chilly, and across at daybreak well rested.

2, July.

Not far away from where we had lain we found the plants which were the object of our visit. *Agave polosana*, Rob. & G. n. sp. *Aspidelap fistulosus* L. 374. I saw my specimen of the latter before collected having got spoiled by rain, while we were gone to Guadalupe.

The train came at 2:32 P. M. and we got back home in time to change dryers.

3, July.

With two trunks full of

specimens we set out for Laredo. The day was cool and sunny. The ride over the plains of San Luis Potosi and Coahuila was somewhat dusty.

4, July.

Reached Laredo about 7.00 A. M. and were disappointed to find I could not do my business, because of the day being a holiday. We took rooms in Hotel Graniteros.

By 4.15 train from the north Lister A. Hall arrived.

Clouds and slight showers lessened the heat we had so much dreaded.

5, July.

I wrote letters and sent a telegram to Pres. Brainerd, in reply to a letter

brought from him by
Lester.

Towards evening Judd
and I go out to the east-
ern edge of town and
there on the sandy plain
collect 3747.

Euphorbia Lasiolepis
Millsp. n. sp.

The day was less cloudy
than the 4th and therefore
warmer.

6, July.

Taking my trunks from
the Custom House, where
I had stored them tempo-
rarily I ship their contents
for home, fill them with
the herbarium specimens
for the Instituto Mexicano
de Mexico, and take them
over the river to the Mex-
ican Admuna. There I
pay the light duty im-
posed upon them, and

then take them to the
baggage room of the Mex-
National.

We then board the train
at 7.25 P.M. to return to San
Luis Potosi.

7, July.

The plains of Coahuila
and San Luis Potosi are
at their driest.

Arrived at San Luis our
trunks are taken to the
Custom house, where I am
required to deposit with
my guia \$5.00, to be re-
turned to me when I shall
move the collection of
plants to the city of Mexico,
and am then allowed to bring
the trunks to our room.

8, July.

We spend the day about
our room, caring for plants,
washing, mending and
resting. Take medicine

to free ourselves from
the poison imbibed with
the water drunk on our
trip.

9, July.

We continue the ne-
cessary occupations of
yesterday.

I call on Sr. Don An-
tonio Espinosa y Coronates
with a card of introduc-
tion from Sr. Barroeta
and am kindly received
and given the freedom
of the great hacienda of
Angostura.

Much rain fell through-
out last night; but
this day is fair.

10, July.

We then alight from
the Tampico train at
Las Tablas Station and
on the alkaline mead-

-ows of that vicinity
collect throughout
the day.

Spartina densiflora, Brog.
Paspalum ³⁷⁵⁵ *tenellum*, Willd.
Castilleja ³⁷⁵⁶ *scorzonifolia*, HBK.
Eryngium Pringlei, C. R. ⁴¹³¹ n. sp.

About two hours
before sunset we set
out to walk back to
San Bartolo station.
At kilometer 365, on
the same spot on which
our bed was made on
the night of June 28th
we pass the night.

Bright-bruzy weather
favors this trip.

11 July.

Rising at daybreak
well rested, we reach
San Bartolo in good
season for our
breakfast.

There we collect
*Flaveria*³⁷⁶⁷ *longifolia*, Gray.
*Xanthocephalum*³⁷⁶⁸ *tomentellum*
*Androsaki*³⁷⁶⁹ *cinerascens*, *Rob.*¹⁰⁶⁶

*Cnicus*³⁷⁷⁰ *excelsior*, Rob.
And at dark board
the train for home.

12, July.

We attend to our
plants, sleep, and
hear a sermon
by Mr. Grimes -
A lovely day -

13, July.

We continue caring for
our plants.

14, July.

We alight from the
train at San Bartolo
in the early dawn and
take the road for the
hacienda of Angostura
some seven miles away

across alkaline plains
covered with a growth of
mesquite and shrubs more
or less sparse.

Cister's diarrhea causes
him to give out by the way
and to turn back towards
the station, and Judah
jars with him to look after
him.

I am kindly received
by Don Pablo Vengas, the
administrador of the
hacienda, who gives me
a guide into the cypress
swamp (Sabinosa). The
unusual drought reaches
even to the depths of the
swamp and I get nothing
except (for sets)

*Juncus*³⁷⁷¹ *atrosporus*, Bald.
and some twenty speci-
mens of *Carex* *Pimplis* *Kailey*.

On the way back to the
station we collect
*Paspalum*³⁷⁶⁴ *virgatum*, L.

We reach the station
a little after dark,
slightly wet by showers,
and make our beds
under a tree near by.

15. July.

In the vicinity of
the station we collect
Polygala ³⁷⁹² *aparinoides*, B. &
Atriplex ³⁷⁹³ *acanthocarpa*, W.
Senecio ³⁷⁹⁸ sp.

No rain, except in
the distance.

16. July.

In our house in
the city we give close
attention to our plants.

A pleasant day.

17. July.

In Fannin's Cation near
the ledge called The
Devil's Wall Judd and I
descend from the train

about 9.00 A.M.

Climbing ^{into}
the woods about the base
of the ledge, I come upon
a few clumps of ³⁷⁸⁷
Polygonia Mexicana, ^{location}
and afterwards search
widely to find single
scattered plants enough
to make up my number of
sixty specimens.

The plants were less than
a span high. Their
flowers with white sepals
and ^{lip} white, striped
with purple, were faintly
beautiful.

On our way back to
Canoas we gather on the
vertical face of bare but
damp rocks ^{deep} in shade
Trichomanes ³⁸⁰⁰ *pyriferum*, L.
Just as we reach Canoas
station on the green meadows
above the head of the
cation, a few brief

showers blown up through
the cañon rattle down
about us. But we spread
our bed on the green sward
and keep dry under our
rubbers - Soon the full
moon shines out, and
the night goes by with
waking and sleeping -

18, July -

After an early breakfast
I go to the hills for picking
specimens of *Xylasma Douglasii*,
Robinson, 3727. Then we get
Vernonia ³⁷⁷³*Erwinbergii*, Gray.
Paspalum ³⁷⁷⁴*notatum*, Klapp.
Paspalum ³⁷⁷²*plicatulum*, Michx.
Cyperus ³⁷⁷⁰*bromoides*, Willd.
Escobedia ³⁷⁹⁴*linearis*, Schlecht.

We welcome the returning
train arriving on time.

No showers seen this day -

19, July -

After caring for plants
in our house we attend the
English service to hear
Mr. Winton preach, then
go over to the Presbyterian
Chapel where Sr. Prieto
preached and Mr. Winton
baptized the baby of Mr.
and Mrs. Bratt. All
exercises in Spanish -

A sunny day over San
Luis as usual.

20, July -

Busy about home

21, July -

Judd and I arrive
at Canoas again at the
usual hour, and proceed to
collect -

Hypericum ³⁷⁸⁴*pauciflorum*, HBK.
Euphorbia ³⁷⁷⁷*serpens*, HBK.
Euphorbia ³⁷⁷⁸*Menziesii*, Wats.
Cyperus ³⁷⁸⁹*millanostachyus*, Liebm.

3781 *Euphorbia prostrata*, Ait.
and 3769
Sicromena leucocephala, Mx.
We make our home in
our old camp under the
cypress trees.

22, July.

Near by our camp we coll.
Anona globiflora, Schl.
Paspalum planifolium Tourn.
Persia Hartwegii, Hermsl.

Rainless weather and
moonlit-nights favor
us on this trip.

23, July.

At home we give the
day to much rest and
to the care of our plants.

Slight showers reach
the neighborhood of
San Luis in the evening.

24, July.

We awake on the Tam-
pico train, as it nears
Carbonas, to find the

sky overcast with clouds,
and the country well
wet down. Entering Tam-
apoco Cañon we encounter a
soaking rain, so we do not
stop at Agua Zacate, as we
had planned, but keep the
shelter of the train till
the less rainy lowlands
are gained. Then at the
stone quarries (Kilo. 125) we
get down into the mud and
wet woods. Continuing down
the railroad we collect
Banisteria Carthagenensis, Jacq.
Persia salicifolia, Hermsl.
Acacia riparia, HBK. 3782

A little before dark we
reach the fountain cave of
the Choy river, and in its
ample shelter we pass
warm and dry the rainy night.

25, July.

Restirring ourselves at day-
break we exert ourselves

to collect as much as possible before taking the returning train and so secure

Asclepias ³⁷⁸⁶ sp.
Aristida ³⁷⁷⁶ *Scabra*, Kunth?
Cordia alba, R. & S. 3784

In Tamasopo Cañon we find showers falling again - in the low meadows and forests flooded with water and raging torrents coming down the mountain sides - light showers were sprinkling the desert hills and plains west of Cardenas and reaching over San Luis. Here we arrived again about 2.00 A. M.

26, July.

Cloudy weather and sprinklings of rain throughout most of the day hindered our drying.

In the afternoon we

attended the English chapel as usual and heard a masterly sermon from Mr. Winton -

27 July -

Drying plants, writing letters, and resting.

Pleasant weather.

28, July -

All three of us by the Tampico train reach Micos at 11.57 A. M.

The boys go hunting deer, and I collect *Mimosa* ³⁷⁹⁸ *Berlandieri*, Gray.

We spread our beds in an open spot in the woods near the station. Only slight showers disturb us, but the heat was oppressive in the early evening, and all through the night misquitos of various species, fleas, and wood-

ticks annoy us, and
Bugs are everywhere most of
the time.

Rioided at last to see
the dawn we get out from
our camp, Judel going to
the hills to the eastward
to look for deer, while
Lester and I follow the river
bank and collect
Cuphea hyssopifolia, HBK. var.
and several other plants in
limited numbers.

Judel brings in a young
deer, and we board the
home-bound train at
11.55 A.M.

Fair weather continues.

30, July. and misson
Caring for our plants,
and resting in our room
in San Luis.

Fine weather.

Gulocroton argenteus, Sibr.
³⁷⁸⁵
³⁸⁹²
* *Rhipsalis cassytha*, Gaertn.

31, July.

Judel and I return to
Micos and collect
Muntingia calabura, L.

* *Olyra latifolia*, L. 3795

Then we follow the rail-
road cut through the mouth
of the cañon and make our
bed on a grassy hill-
side, where the breezes were
fresh and mosquitoes few.
Slight showers fell during
the evening.

I was disappointed to
find the river along the
cascades shut in by dry
precipices on which few
plants were growing. A lovely
orchid was abundant on
trees overhanging the water.

1, August.

On awaking at daybreak
and looking about me
I was pleased to find a plant
of *Manihot Pimpinellifolia*, Watson
n. sp.

growing near. It was a shrub a dozen feet high, and yielded a few flowering specimens. We searched the hillsides for some distance along the road, but found not another specimen of it.

So, also, confined to the gravel bank above our bed were a few plants of ⁴⁰⁰⁶*Folysala Greggii*, Watson which I secured, but could find no other station for the plant.

Then we ate our breakfast in a cool and shady railroad cut and turned back towards the station, collecting

Aristida purpurea Nutt. var.?
³⁷⁹³*Montinia calabura* L.

It was our intention to collect as we returned a Kurson in fruit and the orchid by the river, and

far below the railroad; but by the time we had finished putting up the specimens mentioned above the heat had become insufferable; and, as our water canteen had for some time been empty, we were compelled by considerations of safety to push past these plants and make for the river by the easiest approach and through the forest shade. The forest here being a jungle whose close undergrowth was bound together by vines thorny in part. Near the station we cooled our heated bodies by a bath in the river under the shade of cypress and other trees.

The train came late by an hour and a half, having been delayed by a

wrecked rock train.

This was an unusually hot day. We saw no showers, as we rode to San Luis.

2, August.

I spent much of the day sleeping. We all went to the English service and heard Mr. Kimball of The Baptist mission.

A thunderstorm in the west toward evening.

3 August.

I prepare my plants for shipment home.

A bright hot day.

4, August.

Just at sunrise Judd and I alight from the Tampico train at Las Tablas and on the gravel train reach our abode. The

station proceed to gather throughout the day.

Eriochloa ³⁸¹² *capitata*, R.Br.

Sabbatia ³⁸¹⁰ *gracilis*, Salisb.?

Lithospermum ³⁸⁰² *revolutum*

Carex ³⁸⁰¹ *Pringlei*, Bailey ^{Robinson} n. sp.

A bright and breezy day with thunderstorms in the distant north east at night.

Towards night we climb a dry rocky hill near by to make our camp beyond reach of mosquitoes.

5, August.

Arising at daybreak of a glorious morning we scour over the hill and collect (*Yucca baccata* Torr. var.?) *Hypericaceae* ³⁸⁰³ *Engelmannii*, Krantz. and then pass through the gap in the ridge, the perote, called the "Perote de las Tablas" walk some two miles through the straggling

forest of mesquite and
juniper to a hill of
granitic formation cov-
ered with cactuses, etc.

But for the severe drought
from which the vegetation
on this hill was suffering
we might have collected
here one or two shrubs.

From the hilltop I discern
less than a mile beyond
to the west the fringe of
a cypress forest and thither
we push on over the un-
even surface of an al-
kaline meadow, on

whose surface appeared
here and there fountains
of clear water from
which flowed, though
for but a short distance
usually, streams half
hidden by tall sedges
and grasses. The edges
were *Rhynchospora*⁸⁰³⁶
mariscus, *R. Br.* and *Carex*

Kinglet, *Bailey*, the grass
Spartina densiflora, Brox. with
a sprinkling of *Paspalum* and
Sistr. *maritima*.

Associated with these on the
banks of one of the streams we
found and collected
Pluchea bifrons, etc. 3819

and afterwards tramped
back to the station to gain
the returning train. The points
of the stiff leaves of the *Spartina*
sharp as pins annoying us not
a little, as we struck them
with our legs in wading the
wide meadows.

The burning of a box car
loaded with isle (fiber of
Agaves, etc.) at the station
prevented for an hour the
passing of our train.

Pleasant weather ^{has} favored
us on this trip.

6, August.

Leaving my assistants to
care for the plants, I take

at 7.30 A. M. the train
bound for Aguas Calientes
and ride as far as La
Honda, where last year
about this season I found
Carex Potosina. ^{Humb.} But
this season these meads
and plains are absolutely
brown and dry, without
any green grass, and I
fail to find a vestige of
the Carex.

I collect leaves and
fruit of
Yucca filifera, Chabaud.
and reach San Luis by
returning train at 7.00
P. M.

7, August.

Juld and I reach La
Canoas about 8.00 A. M.
where rain was falling, as
during much of the time
for a day or two previous.
It ceased, however, till

about 4.00 P. M. giving
us a chance to follow a
gulch up into the hills
and collect

Piperomia blanda, HBK. ³⁹⁰⁶
Achimenes grandiflora, DC. ³⁸¹⁴
Linum Schiedeianum, Ch. Schl. ³⁸⁰⁷
and finding specimens of a
medium sized tree presumed
to belong to the Sapindaceae, -
Wimmeria bicolor, Ch. Schl. ³⁷⁸⁶

Closely wrapped in my rubber
coat out in the rain on a
wet meadow near by our
camp under the cypress trees
Habermaria Pinglei, Rob. n. sp. ³⁸²⁹

Then as darkness came on,
and the rain continued
we lay down for the night
wrapped in our rubbers,
kept dry except for the
retained perspiration of
our bodies and slight
sweat and sound, though
it rained upon us all
night.

L. Dichotomum, L.
④ *Peperomia Binglei*, a. Se.
n. sp.

8, August.

The rain lasted until noon, but we kept busy collecting and preparing specimens.

Two or three hours of the afternoon before the coming of the home-bound train we spent in the barranca climbing trees and getting down specimens of ³⁸² *Polypodium angustifolium* Willd.

We found a clump of some *Lycopodium* high in the branch of an oak, and got it down. It made about twenty fine specimens.

Reaching San Luis about midnight we found the streets wet with rain once more.

9, August

A rainy day with no chance for drying plants.

We hear Mr. Winton preach

10, August.

Filling two large trunks full of plants I take at 12.45 P.M. a train made up at San Luis for Laredo, the regular train being much delayed far to the south. I could accompany me.

The sky as we glide northward over the plain is obscured by leaden clouds, which drop local showers. Our train ran into one which covered the ground with a sheet of water that must have been two inches deep.

11, August.

It was about 9.30 A.M. when we arrived in Laredo. Shipping a box of specimens home - contains 20 cubic feet - and another small box

of Cactuses, agaves, etc.,
to Shaw's Gardens, St. Louis,
and getting trucks started
back to San Luis occupied
the time till bed-time.

Towards evening the heat
of Laredo was tempered and
the dust laid by a good
shower - a rare occurrence
in this region -

12, August.

About 8.30 A.M. we
take the east-bound train
and a little before noon
get off at Pina to look
for bulbs of Tipidina buc-
cifera. But we found the
fields of that vicinity
quite dry and brown
and cattle ranging there
at-will. Where two and
three years before were
tracts of wheat, corn,
cotton and melons,
now not a single plant

of these crops was to be
seen, so complete the drought
of the present year and of
the last. A few plants of
the Tipidina had come up
and flowered, and then soon
dried up.

So about 2.00 P.M. we
are glad to see coming the
train which will bear us
back to Laredo.

Arrived there we have
an hour or two for making
our purchases before taking
the Mexican National
train to return to San Luis.

13, August.

In agreeable contrast to
the heat and dust of the
Rio Grande Valley is the
cool fresh air of ^{the} tablelands
over which we ride from
Saltillo to San Luis Potosi.
And bright and gladdening
are the vines.

We arrive home on time

and have time to make preparations for another trip and take two or three hours sleep before taking the train again -

14, August.

The kind conductor
on the The Tampico train
lets off Gidd and me at
a point some five miles
above Las Canoas, where
on Limestone hills we
collect.

Trabesantia angustifolia Rob

Tripsacum dactyloides L., var.

Manchot-Pommes, ^{argenteifolium, Scrib.} Wilson 2 - w.

9.3822
Pithecellobium watsoni, Coult. & Rose

and then walk to Canoe
by nightfall. We make our
camp ^{again} under one of the
giant Cypress on the bank
of the stream -

A great thunderstorm
come up from the east-
ern lowlands in the

early part of the night and rain continues till morning; but as usual we rise dry and warm, and sleep sound and rise refreshed and eager for another day's work.

15-August.

In the vicinity of the station
we collect at first

Ophioglossum reticulatum, L. 3816
with cordate fronds

- then enter the barranca and
ascend over the great vale.

shaggy to their outermost
twigs with all sorts of plants

not only mosses and lichens
and ferns but ^{Papaver} ^{Syring}
^{but} even Dahlias.

and Arracacins, but ^{we} fail
to find another clump of

The *Lycopodium* discovered
on our last visit -

But these trees yield us

abundant specimens of
3855-
Peperomia edulis Miq.

³⁸⁰⁸
Panicum divaricatum, L.

So at the close of a pleasant day we turn homeward well laden with specimens.

16, August.

We care for our plants, enjoy a needed rest, and hear Mr. Winton preach. A pleasant day.

17, August.

Judd and I go to Rocas and collect about a gravelly wash some two miles beyond the station ³⁸²⁰
Arisaema virgularis, Des.

A warm drying day - showers at night.

18, August.

Judd and I take train for our eighteenth trip on the Tampico road, alighting at Las Canoas and going directly down

into the barranca, where we gather

³⁸¹⁷
Panicum rhizophorum,ourn.:
³⁸²⁴
Sickonia rubiginosa, Kallf.

³⁸¹⁹
Bellis purpurascens, Robinson

³⁸¹⁸
Melampodium montanum Bth.

The streams were roaring torrents from recent rain, but the day was bright and warm.

We lie down under the dense canopy of a great cypress tree.

19, August.

In the early morning we collect various plants in small numbers on the hillides near the station and then for sets.

³⁸⁰⁶
Cyperus Surinamensis, Retb.

Then we go on in the barranca again and on the mountain side beyond searching over the rocks densely draped

with plants in a rain.
attempt to find more
specimens of the *Cycopod-*
ium, of which a single
clump was found a few
days before.

Another pleasant day,
and no rain on this
trip.

30, August.

We are all busy in
our San Luis home
working over our plants.

At 5:00 P.M. I go out
two miles to the fields north
of the city and collected
Gutierrezia ³⁹⁰¹ *Berlandieri*,
Nephrolepis ³⁹⁰² *Hartwegi*, ^{4th} *grass*

A fair day -

21, August.

Judd and I are out
again on the Tampico
train and stop at Las
Canoas. We went to

the summit of the mountain
some two miles to the
southeast of the station start-
ing up a doe with two fawns
and a turkey with a half-
grown brood, and collect-
ing

Solanum ³⁹⁰¹ *diversifolium*, *Sala-*
Bauhinia ³⁹⁰² *platyphylla*, *Benth.*
Selaginella ³⁹⁰³ *rupestris*, *Spring*,
var. mexicana, *underw.*

We find the crest of the
mountain exceedingly dif-
ficult to travel, the limestone
being of the roughest kind
and its frequent crevices
and holes being concealed
by shrubs, vines and moss.

Late in the afternoon we
return to our camping place
and after eating our dinner
collect

Planicum ³⁹⁰⁴ *plantaginifolium*, *Link.*

A slight shower fell
about 9.00 P. M.

3909

Heteropteris Bucheyana, A. J.

22 August.

We spend most of the day in the barranca and collect

Schizanthus pallens, ³³²⁷ Sill.
Aspidium melanostichum ³³²⁸ - ^{Runge}

for sets, and several choice plants besides, a few specimens of each.

Then we go up on the slope beyond in another vain search for the *Lycopodium*.

Another pleasant day -

23, August.

We are all at our San Luis home caring for and arranging plants and resting.

In the evening I take the boys to see a bull-fight. Pleasant weather.

24 August.

Lister having been called to attend the

death-bed of his mother, he and I take train for Laredo, having filled a large trunk with plants for him to see home.

25, August.

I am Lister on board the north-bound train buy some provisions, etc, write letters, call at Mrs. Nickels, and then at nightfall start back for San Luis -

Hot weather in Laredo as usual -

26, August.

The ride from Saltillo to San Luis was quite a comfortable one but for some dust.

Found that Gold had had good weather for drying.

27, August.

In the morning
we go outside the
city to the river wash
and collect
Gnaphalium ³⁹⁰³ *leptophyllum*, DC.
Another rainless day -

28, August.

Judd and I make our
twentieth trip on the
Tampico road and
are let down from
the train at the water
tank in Tamasopo Canon.
We collect

Scutellaria ³⁹¹⁰ *purpurascens*
Bignonia ³⁹⁹³ *aguinoctialis*, Swartz
and then walk back
to Las Canoas Station,
to sleep under the cypress
trees.

A dry day and a dry
night.

29, August.

We collect near the
station ³⁸⁹⁹
Synedrella ³⁸⁹⁷ *valis* Gray -
Habenaria ³⁹⁰⁷ *brachyceras*, Lindl.
Spermacoce ³⁹⁰³ *parviflora*, Gray.
Desmodium ³⁹⁰³ *plectocarpum* ^{Hemsl.}
No rain on this trip.

30, August.

In our San Luis home
caring for our plants and
resting.

Attend the English service
and hear Mr. Keall preach.
A dry day.

31, August.

Mr. Winton goes with me
to the custom house to help
me receive the guia and
the \$5 left there on the
7th of July. We found that
the official who took the
paper and the money had
left the employ of the

Custom house, having re-
ceived no account of the
money, which he was
told he had no right to
require. By a lucky chance
the papers found tumbling
around loose in a desk.

At 5:30 P.M. we start
with two trunks containing
the mounted collections of
plants to deliver it to the
Instituto Medico Nacional
in the city of Mexico,
going by the National road.
By car then.

1, Sept.

We arrive within the
state of Mexico and near
the station of Patero amidst
green fields bespangled with
flowers and hills covered
with oaks and pines. Here
the swollen streams and
the numerous ponds give
full tell of abundant

rains.

We reach the city about 1:30
P.M. and take a room in "El
Comercio" hotel in Cinco de
Mayo Street.

Spent the afternoon to un-
packing and arranging the
collection.

Rain throughout the evening
and night.

2, Sept.

After spending much of
the day in hunting up the
Instituto and its director, Dr.
Jose Ramirez, we deliver the
plants.

The Instituto Medico Nacional
is not a medical school
but an institution endowed
by the nation for botanical
study and the investigation
of the remedial values of
plants by the physicians of
the city. Extensive collections
of plants are being gathered

here, and there are laboratories for chemical and bacteriological study.

I was gratified to find my Chihuahua herbarium preserved here intact - and to learn that it is esteemed of high scientific value, that it is to be kept separate, and to be extended by my present and future collections.

Rain on the mountains.

3, Sept.

I call in the morning at the editorial office of "The Two Republics" and get "pumped".

On Rev. S. F. Watkins and receive the kind offer of his room in Toluca.

In the afternoon visit the Institute to receive pay for the collections.

Then with Mr. Watkins

call at the office of Secretario de Fomento to ask for letters of introduction to the governors of states to be visited this season - and finally get my trunk to the Central station and from there checked back to San Luis.

Showers in the evening

4 Sept.

In the forenoon set out towards Colonia station and in ditches collect

³⁸⁹⁵ *Cyperus Borysai*, Clark, n. sp.

In the afternoon with Sr. Josè Ramirez I spend two hours most pleasantly in the herbarium of the National Museum with Don Manuel Urbina the curator. I look over a part of an herbarium of Schaffner's plants treasured here. It is but scraps of plants.

for the most part and that
there are no notes and
their paper sheets are
two of each species, and
bound into eleven volumes.
The specimens are not arranged
in their natural order.
They are numbered from
without citations in Con-
tributions X and XI, many
errors being made probably
from transposition of the
numbers.

Besides this collection the
Herbarium possesses a large amount
of material in bundles
and some specimens of
average quality mounted
on double sheets of thick
paper of large size.

Dr. H. B. G. has a large
number of specimens from very good
localities and large numbers
of plants as possible, mounted
in the "Gardener's Manual"
which is understood to be the

Dr. H. B. G. also has my
collection in continuation,
mounted as before, common
plants as well as those of the
regular distributions.

From 5:30 P.M. I waited
some time in the entrance
of the Hotel de la Marine
Fernandez Leizaola to be
told at last to return again
the next evening.

Showers in the evening.

5 Sept.

We took the National train
at 6:15 A.M. and spend
the forenoon on the hills
above Rio Honda station
collecting.

3896, *Yucca rigida*, Cav.

3897, *Yucca rigida*, Cav.
3898, *Yucca rigida*, Cav.
3899, *Yucca rigida*, Cav.
4000, *Yucca rigida*, Cav.

Rain begins about noon
as we are returning to the
city. It rains right at
times, so by the time we

take a street-car to go to the Central Station, there is a foot of water in some of the streets through which we have to pass covering the sidewalks and filling them from threshold to threshold. An overloaded car preceding ours gets stuck in a difficult place and a long line of cars come up behind us. An hour is spent in vain efforts to move forward, while rain falls and the waters around us boil with passing coaches and eager foot passengers.

We only reach the vicinity of the station, when the train had been gone half an hour. So, we find our way through mud and water to the Buena Vista Hotel, and

seek comfort in beds -

6, Sept.

We take train on the National road at 8.00 AM, intending to stop over on the summit of the mountains until the through train should come along; but we found the mountains wrapped in cold mists and the plants and soil sodden with wet. So, we stop in Toluca instead, and I look out quarters, hoping to be able to return soon to collect the vegetation of the mountains seen in interesting variety as we passed -

7, Sept.

Morning dawns upon us at San Miguel de Allende. Here the sky was cloudy, and there were indications

of a recent rain to
freshen the vegetation.
And so on to within
fifty miles of San Luis;
and some of the corn
was exceeding and bearing
ears.

We gained San Luis at
10.15-A.M. Here the
sun was shining out
and a warm bright
day succeeded.

We applied ourselves to
drying plants and other
cars.

8 Sept.

As the Hotel del Jardin
is to change hands, we
have to move out, and
we find a good room
in the house of a Mex-
ican, apparently a kind
old man, on the opposite
side of the station of
the Mex. Cent.

I visit missionary friends
about town.

A dry sunny day -

9, Sept.

I write to Mother and
to Dr. Watson, and we
prepare to make a trip
to Guadalupe, sending
our trunks on by the
Central train.

We take the National train
south at 5.30 P.M., reach
Celaya at 12.00 P.M., and
walk from the crossing to the
Central Station, sleeping a little
by the way as much as
the odd of the starry night
would allow.

10, Sept.

By a train somewhat
late we leave Celaya at
6.15-A.M. and Irapuato at
9.00 A.M., and reach
Guadalupe about 5.00
P.M. where we are.

kindly welcomed by our friends the Howlands.

We find Jalisco comparatively dry, though rains are occasionally falling.

11 Sept.

We go to the bluffs of the barranca and search for sets.

Otopappus acuminatus, W. ³⁸³⁷
Lesmodium gramineum, Gray ³⁸³⁶
and several other species in limited numbers.

A sunny day.

12 Sept.

Returning to the same field we collect

Ficus Pimper, Watson ³⁸⁴⁰
and two *Umbiliferae*,
Pisoniadiadum acuminatum ³⁸⁶⁴ C. & R. n. 38
Pisoniadiadum cuneatum ³⁸⁶⁸ C. & R. n. 38
besides a composite
Verbena serrata, Cav. ³⁸⁴⁸
and some small lots.

This was a hot day.

13, Sept.

Mr Howland kindly permits us to spend the day in his distant and secluded garden where we give attention to our plants and read. The bright sunshine favors our drying.

14, Sept.

We go to the bluffs of the barranca and get for sets
Hypericum Schaffneri, Watson ³⁸³⁷
Rothlone Schaffneri, Underw. ³⁸⁸⁰
var. *Mexicana*, Savoy ^{n. 3841}

Still dry weather.

Agopogon cucurbitoides, HBK. 3964.
15, Sept.

Again beginning where we left off yesterday we collect
Amimela hirsuta, Swartz. ³⁸⁶⁰
Pennisetum multiflorum, L. ³⁵⁴⁹
Sporobolus capillaris, Vasey. ³⁸⁶⁸
Heteropogon polystachyus, Watson 3934.
Still no rain.

16, Sept.

I go by train to the station of La Barca and in fields near by collect

Zinnia ³⁸⁴⁶ *angustifolia*, HBK.

Melampodium ³⁸⁴⁷ *glabrum*, W. n. sp.

Judd spends the day in Mr. Howland's garden drying plants.

A shower falls in the afternoon.

17, Sept.

We go back to the bluff of the barranca and collect.

Crusia ³⁸⁴⁸ *cruciata*, W. n. sp.

Rhodocladum ³⁸⁴⁹ *Pingii*, W. n. sp.

Sisyrinchium ³⁸⁵⁰ *platyphyllum*, W. n. sp.

Coultrophytum ³⁸⁵¹ *laxum*, Rob. n. sp.

Mr. Brockway and his son join us towards night. Showers in the distance.

18, Sept.

While Judd goes to the garden with our plants

to attend to the drying of them, I go by street car to Atamizuc and thence walk some three miles beyond towards the great river.

On the northern slope of a rocky hill I find in fine fruit an umbellifer with pubescent stems which I had mixed up with a similar one with glaucous stems and taller in the

12th inst. So I collect it.

Pionosialium ³⁸⁵² *serotinum*, C. R.

Diadia ³⁸⁵³ *terrestris*, Walp. - 3853

Salvia ³⁸⁵⁴ *pectinata*, Kunth.

No rain during this day.

19, Sept.

I descend into the barranca to gather a supply of the new form *Hemionitis* ⁴⁰⁵¹ *elyans*, Buxifort, and near by its station find

Crusia ³⁸⁵² *myalocarpa*, Watson.

A rainless, hot day -

20 Sept.

We stay in the city giving some attention to our plants and reading and resting a little. go to lunch dinner with Mr. Wm. Brockway and his family -

A pleasant day -

21 Sept.

We descend far down into the barranca collecting *Japotea filifolia*, Cop. 3829

³⁸⁴⁶
Senecio macrolepis, Rose

³⁸³²
Aschomene fascicularis, Ch.

³⁸⁵⁷
Ficus ticalutensis, Mig.

³⁸⁵⁸
Bumelia Palmeri, Watson

and return late and tired.

A pleasant day -

22 Sept.

As the two last mentioned plants were brought in in bundles to Kason one same time in the

morning to arrange the specimens in papers.

Then I have to go out and buy some paper -

Go out to the garden at midday and take dinner with the Howlands, then stay the rest of the day to help Judd dry plants.

Showers in the evening.

23, Sept.

With Mr. Brockway's man Ricardo we go down into the barranca and collect

Ficus Jaliscana, Watson, sp.

³⁸⁹⁸
Ficus Guadalupeana, W., sp.

³⁸⁷⁹
Echinidia nodosa, W., sp.

³⁸²⁸
Panicum brevifolium, L.

No rain -

24, Sept.

Ricardo and I go to Rio Blanco, and Sierra

de San Esteban, and
collect

3542

Eriosema diffusum, Don.
³⁵³³
Rhynchospora Mexicana, Steud.
³⁵⁴¹
Lyptosyni Mexicana, Grog.
No rain.

Gnaphalium limbatum, Don. 3539

25 Sept.

I go to the vicinity of the
barranca and secure
Ficus fasciculata, Watson.
³⁵⁴³
Cyperus melanostachyus, Linn.

A shower passes lightly
over the vicinity of the
barranca to descend
heavily upon Guadalupe
with two Mexicans, a
woman and a cowboy I
find shelter under the
fig tree, and when the
streams begin to run
down the trunk and
drive me from my cover,
the boy kindly broods
over me and keeps
me dry with his

broad straw hat and
blanket.

26 Sept.

I go back to the field
of yesterday and finish
collecting my complement

of ³⁵⁴³
Cyperus Brainerdi, Britton
n. sp.

then after getting leave
of Bonifacio Palmeri, with
mango fruit gathered
in the spring, I secure
³⁵⁴⁵
Coranthus Palmeri, Wats.

Meanwhile a shower
passes, but I keep dry
under a rubber blanket
brought out with me.

27 Sept.

Considerable sunshine
enables us to make
some progress drying our
plants, which we
undertake to do in

Mr. Howland's house -

28 Sept.

I go to the barranca and Judd joins me in the afternoon, because the weather is so cloudy and sprinkling that he cannot dry plants.

We collect

Acacia Teguilaria Watson ³⁸⁷³
Cyperus atropurpureus, Libos.

A fine rain falls throughout the night.

29 Sept.

Near the barranca I devote the day to *Arctostaphylos grandiflora*, Watson getting a number of specimens for herbarium specimens and a quantity of roots for cultivation.

Weather clearing.

30 Sept.

I go out to the barranca and return by way of Atamejac -

The ^{specimens} *Ficus fasciculata*, Wats. collected on the 25th were so long drying on account of bad weather that they fell to pieces, therefore I first on this circuit get fresh specimens of this species, then collect

Delphinium azureum, Wats. ³⁸⁷⁵
^{var. virgatum, Griseb.}
Besnothium quadrangulum Wats. n. sp.
and secure more bulbs of the *Arctostaphylos*.

A bright day -

1, Oct.

I go to the little waterfall about three miles north west from Atamejac and collect

Piper Jaliscoanum Watson n. sp. ³⁸⁷¹
Besnothium orbiculare Scht., ³⁸⁷⁷
var.

And get besides these a
good supply of *Asplenium*
Pringlei, *Sorensenii* and
Notolana brachypus, Hook.

A lovely day -

2, Oct. ⁷ Salta de Juanacollan
Going by railway
and tramway to the
great falls of the river
Some twenty miles east
of Guadalupe I collect
Pisonia hirtella, HBK. 3879
Paspalum ³⁸⁸⁴ *pyramidalis*, Mus.
Luziola ³⁸⁶⁷ *Peruviana*, Juss.
Saportia ³⁸⁸¹ *lorigittii*, Watson
Hyptis ³⁸⁷⁴ *articularis*, HBK.

Weather somewhat
cloudy with thunder-
storms in the distant
east.

3, Oct.

Far down into the
barranca I go to collect
Sesuvium ³⁸⁸² *spirale*, DC., v.

And I also get specimen
of *Polygala* ³⁸⁷⁶ *Alboreana*, Chodat
to complete my complement.
Showers at night.

4, Oct.

I go out to the cemetery
and to the pulperias beyond
with M^{rs} Brockway,
and Macra, then
with Judd give atten-
tion to our plants; after-
wards we take dinner
at Mr. Brockway's
and visit Mr. Rudolf
Abell.

Thunder showers
in the evening.

5, Oct.

With Rudolf Abell we
pass through San Andrés
and two other villages with
hard Indian names, and
go down into the barranca
of the great river, where

6. Oct.

On my visit to the "Salto
Juanacattan" on the 2nd
inst. I found a large
Umbellifer*, but as I was
in doubt about its being
distinct from species already
collected, I took but a dozen
specimens. Today believing
it worthy of more attention
I go back and secure mate-
rial enough to make up
sixty specimens. It grows
among the broken rocks
below the falls and between
the bananas and the
water's edge, but more
abundantly on the east-
side of the river scattered
over a rocky hillside.

It is the largest plant of
this family yet seen by
me being commonly ten to
twelve feet tall.

Rain in the afternoon
and during the night.

we collect on the verge
of cliff. 3884. Schk.

Pitcairnia Karwinskiana.

On our way back we
gather flowering speci-
mens of 3861.

Casimiroa edulis, Karw. ex
a good sized tree, yielding
in the spring months a
fruit as large as an
apple, white and called
"Zapote", "Zapote blanco"
or "Zapote amarillo".

This grows singly or in
clusters of two to five,
according as more or
less of the five pistils of
the flower become
fertilized.

We reach home an
hour or more after
dark and just before
a thunder shower over-
takes us.

7, Oct.

We go out to Rio Blanco
and in little grassy pools
amongst the stone quarries
collect

3855

Eriocaulon bilobatum Morong

3857 *Eleocharis atropurpurea*, Ktze.

We encounter a shower
before reaching Atamajac
on our return.

8, Oct.

I return to the
vicinity of Rio Blanco
chiefly for bulbs of
Arilliza but col-
lect in fruit.

3859

*Desmodium Jalisco-
rum* Watson.

Showers keep in
the distance.

9, Oct.

About the bluffs of
the Barranca in the
vicinity of the sawmill

while gathering bulbs
of *Bessera elipant*, we
collect

3878

Desmodium tortuosum, L.

3880
Picus sp.

The wind has changed
to the north and blows
cool, the sky is cleared of
clouds, and the rainy
season has apparently
come to an end.

10, Oct.

We devote the day to
gathering bulbs of *Bessera*
from bluffs above the
barranca.

Weather still clear
and cool.

11, Oct.

In Mr. Howland's house
and in his garden we give
needed attention to our
plants and made a little.
And I go out into a ravine

just within the city
walls and collect
Piper ³⁸⁸⁸ *leucophyllum*, C. DC.

12, Oct.

In the pond near El
Castillo station I gather
flowers of

Nymphaea ³⁸⁹¹ *fragilis*, Zucc.
and on its wet margin
Eleocharis atropurpurea, Kth
again.

13, Oct.

We take train to return
to San Luis Potosí with
the collections gathered on
this trip to Jalisco—
between 4000 and 5000
specimens, sixty species
for sets.

In Celaya we have
some six hours between
stations, and we lie
down on the ground
and again on the

depot platform and get
considerable sleep, despite
the cold of the moon-like
night.

14, Oct.

At 10.15 A.M. we are
back again in San Luis
where our plants and
our mail and our friends
receive our attention through-
out the rest of the day—
we find the weather
here bright and dry
and the city very dusty.

15, Oct.

I arrange plants for
shipment home.

16, Oct.

While Judd goes on to
Las Canoas for a day of
turkey hunting on the
hills of that vicinity, I
alight from the Tampico

train near Cardenas
and on a dry calcareous
hillside collect ^{was found}
Muhlenbergia articulata, Scribn.
Polygonum ³⁹¹³ *marifolia*, Gray.
Cyphia ³⁹¹⁸ *lanceolata*, Ait.

Then walking to Canos
pass through the quaint
and picturesque village
of La Labor, and on the
rolling verge of the brush
amidst the cornfields
below the village gather

specimens of
Cypripedium ³⁹¹⁷ *humilis*, Rth. var.
elgii, Britton.
and some time after
dark find Jack with
a turkey he has shot
in our old camping place
under the great cypress
trees beside the rocky bank
at Las Canoas.
In this region too the
mountain quail several
days ago

17, Oct.

On the hillside above our
camp we collect ³⁹¹⁴
Eupatorium *ivafolium*, L.
and fruit of *Acacia* *Teguil-*
ana, Watson, then go down
into the barranca and
secure sets of ³⁹²⁰

Asplenium *hastatum*, Klottsch
Zenites ³⁹¹⁹ *Mexicana*, Trin.
before the return of the
train which is to bear us
back to San Luis.

18, Oct.

We give needed attention
to our plants and hear an
excellent sermon by Mr.
Winton.

I call on Mr. Pierre Louis
Gony, Smithsonian collector
in Zoology and his wife
first visit on the train
yesterday, and take them
first to church and then
to Mr. Baskin's to

find a home -
High winds and drizzle.
ful dust. Slight showers.

19, Oct.

We prepare and pack
plants in order to take them
over the boundary for shipment.
[23 species]

20, Oct.

Having decided to go out
to El Paso rather than to
Canada we take the train on
the Central at 7.30 A.M.
change cars at Aguas Cal-
ientes a little after noon
and pass Zacatecas just
before dark. Between trains
at A.C. corner
3932 *Briocilia Coulteri*, Gray

21, Oct.

Sun dawns soon after
we have passed Jimulco
and we leave Chihuahua
a little while after dark.
The country traversed
today appears exceedingly

dry and barren. No corn
has this year been planted
on the mesas, only in the
valleys and under irri-
gation was there a good
stand of this crop.

22, Oct.

Arriving in El Paso in
the morning we take a
room in the lodging house
which has long been my
home in this city - first
it was called "The St. Char-
les", then "The Elchidi" but
now "The Atlanta".

Shipping our plants
and calling on my old
friends over the river, the
bright, consumes the day.

23, Oct.

In the morning Mr.
Wright kindly goes with me
to the Adulana, or Mexican
Custom House, to interpret

for me, and we obtain permission to take over the line a trunk full of paper free of duty.

Then I make among purchases, and before dark we are on the train re-
turning southward.

24, Oct.

When the train reaches Chihuahua in the early morning we leave it and take a room in my old home the "Hotel San Juan".

We have stopped over in Chihuahua for the purpose of shipping to San Luis my wagon and contents, and this task requires all the day.

With Rev. Mr. Kilgore of the Methodist mission I leave my saddle for his brother-in-law, Mr. Chase, the terms being that Mr.

Chase may pay me something for it - (\$5. or \$10) if he wishes.

In the evening I call on the lady teachers of the Cong.^t mission.

25, Oct.

We travel through out the day from Chihuahua to Jimuleo on a train of which my old friend Wm. J. Cheney is conductor.

26, Oct.

We stop off the train at Zacatecas about 9, or 10 A.M. and on the hillside south of the city collect for Sel,
³⁹³⁹ *Lamoureauxia tenuifolia* DC.
³⁹³⁸ *Montanoa purpurascens*, R. & G.
³⁹³¹ *Paronychia Mexicana*, Small

27, Oct.

In the morning we board the south bound train, pass Aguas Calientes between 1.00 P.M. and 2.00 P.M., and reach San Luis an hour after dark.

28, Oct.

Judd dries plants, while I call around on friends, getting mail, delivering purchases, etc.

29, Oct.

With Mr Beall I go out to Morelos to see the great smelter then building. I find the vegetation frost-bitten and dried up.

30, Oct.

At Las Canoas I hire a man to gather plants of *Chamadorea Pringlei* Watson n. sp. for shipping to Messrs. Fletcher & Manda, and on this day and the following we secure a trunk full 200 or 300, large and small.

I collect

3936

Colea salmifolia, Hemsl.

³⁹³³
Relbunium fragilis, Rob. n. sp.

³⁹³⁹
Lopezia angustifolia, Rob. n. sp.

Schaffia Schreb., Lam. ³⁹²⁹

As we lie in our rubbers under the great cypress trees we learn that the nights have become cool even at Canoas.

31, Oct.

Today collect

3921

Panicum sulcatum, Aubl.

³⁹³⁷
Gymnoloma microcephala Less.

1, Nov.

We care for our plants in our home in San Luis, and hear a good sermon preached by Mr. Grimes.

2, Nov.

In the forenoon we get our wagon from the train and deliver it to Mr. Grimes.

In the afternoon I go out the river at Morales and collect ³⁹²² *Ranunculus stolonifer*, *Griseb.*

3, Nov.

While Judd goes on to Las Canoas to hire Don Celso and gather roots of *Blitum campaulata*, Cav. & Desf. I leave the train at Cardenas and go back westward from the station and collect for sets.

³⁹²⁹ *Heliospis annua*, Griseb.
³⁹³⁰ *Griseb. avenacea*, Griseb.

Then I set out to walk down to Las Canoas following the railroad most of the way.

Thus I collect

³⁹²³ *Melampyrum divaricatum*, DC.
³⁹³⁸ *Lamproloma tenuifolia*, DC.

From Cardenas to Las Canoas by the line of the railroad is fourteen miles, but this in descending the hills or in finding its way among them makes numerous curves and loops, so by going across fields in two places I was able to shorten my walk by nearly two miles.

Yesterday in unloading my wagon from the box car I was seized with lumbago, so I suffer much pain unless I move with the greatest care. To strike my foot against a stone or step off a cause in

This darkness causes me to
cry out.

Early in the day the sky
became obscured by clouds
coming up out of the east,
slight showers fell at
times even on the heights
near Cardenas, and, as I
got down near Las Canoas,
a fine rain was coming in
my face. As Judd had
taken all the rubbers to
Las Canoas, I got my coat
wet through. But about
7.30 P.M., or an hour and
a half after nightfall,
I found Judd looking for
me in a dry bed under
the cypress trees. I wrung the
water from my coat, and
lay down under the rubbers
to sleep warm and sound.

4. Nov.

We go on from Las
Canoas into the

Canon and collect

³⁹²⁵
Mikania cordifolia, hills
for sets and several
species in small num-
bers. We are deterred
from descending into the
barranca by fear of
"pinakillas" minute
insects which by their
venomous bites cov-
ered us with lasting
sores on our last
visit there. Besides
the condition of my
back, made it un-
advisable for me to
undertake so much
exercise.

Slowly the sun dis-
persed the clouds
and dried up the
wet, and the after-
noon became clear
and warm.

The engine of our
home-bound train

Became disabled
between San Bartolo
and Carritos about 8.00
P.M.; ahead of us was
a wrecked freight-car,
so we were delayed
nearly eight hours.

5, Nov.

We reach San Luis
about 7.30 A.M. and
spend the day drying our
plants.

6, Nov.

At 10.40 A.M. we
leave San Luis with
two trucks full of plants
to be shipped from Laredo.
Harvey Bridges accom-
panies us.

My pains are consider-
able.

7, Nov.

Arrived in Laredo
about 7.00 A.M., we

pass a busy day shipping
a case of plants to Messrs
Pitcher & Manda, Short Hills,
N. J., and making pur-
chases for friends in San
Luis and Guadalupe.

At night we start
back but forget to take
our blankets left in
the baggage room at
Nuevo Laredo station.

The dust of Laredo had
been laid by a shower
the evening before our
arrival, but the heat
was uncomfortable.

8, Nov.

A dusty ride it was
over the plains. We reach-
ed San Luis about 5.15-
P.M.

9, Nov.

Returning purchases -

10, Nov.

We alight from the Tampico train at Micos about noon and hiring a man to help us proceed along the railroad about two miles where we descend a steep rocky slope to the cascades of the Concepcion river, and then from there overhanging the water we gather a quantity of plants of an orchid, seen in flower there in July. Returning to the station I collect for ants a *Cabiato* ³⁹²⁵ *Myrmica suavis*, Fitch.

We lie down on the platform of the freight house covering ourselves with our rubbers and sleep very well through a little cold.

11, Nov.

A heavy dew hinders our work in the morning, but before the train returns at noon we have collected

³⁹²⁶ *Cassia bicapularis*, L.

³⁹²⁷ *Adelia barbinervis*, Souter.

All the afternoon, as we ride between Micos and Cardenas, I find constant occupation in picking off "pinacillas" with which I got covered in the morning.

After we get home, Fitch helps me rid myself of the last of these, and I realize that I am to have a sore time for a week or two.

12, Nov.

With Harvey
Grimes I take the
train for Laredo at
10.40 A.M. I ship
the orchids just
gathered to New
Jersey and to re-
cover our blankets.
The ride over the
plains is very dusty
but cool.

13, Nov.

A cloudy morn-
ing in Laredo, but a
sunny afternoon.

Not being too much
hurried as before, I call
on Mrs. Nichols and
her son.

14, Nov.

I get back to San Luis
at 5.15 P.M.

15, Nov.

I take a long nap, and
thereafter we hear a good
sermon by Mr. Winton.

16, Nov.

Resting and preparing
to leave on a trip to the
State of Michoacan.

We take the south bound
train at 5.40 P.M.

Mr. Winton and wife with
Miss Mason of the Meth-
odist mission school
together with Mr. Wilson, a
most friendly conductor
on the Central Railroad
compose the party accompa-
nying us.

Mr. Grimes today sold
my wagon for \$200.

17, Nov.

As we rode from
Acambaro to Patzcuaro, it was
disappointing to see the aspect

tion mostly killed by frost and now dry and brown.

We reached Patzenaro station at 5:15 P.M. and put up at Hotel Ibarra on the shore of the lake.

18 Nov.

While Judd went hunting with our party on the lake, I hire a Mexican and together we collect on the hills east of the station about 2000 bulbs of *Milla biflora*.

Weather dry and sunny, comfortable and charming.

19, Nov.

Hiring three Mexicans at a dollar a day each we go to the island hill near the east end of the lake and, while the others dig bulbs, I collect herbarium specimens most of the time

securing for us

Bergia ripida, Gray, var. ³⁹⁴⁹
Trisetum dymisoides, Kth. ³⁹⁵⁰
var. *pubescens*, Scribn.

20, Nov.

Today we all gather bulbs.

21, Nov.

With the Mexican, Juan, Judd and I go into the hills six or seven miles to the east where we secure for us ³⁹⁵⁴
Salvia lavanduloides, HBK. ³⁹⁴¹
Gentiana lanceolata, Griseb. ³⁹⁵³
Copezia pubescens, HBK. ³⁹⁴³
Bletia campanulata ^{var.} *flav.* ³⁹⁴³
and a quantity of roots of the last.

22, Nov.

We devote the day to caring for our plants and resting.

23, Nov.

Once more we engage the Mexican Juan and all three take the train at 6.45 A. M. for Chapultepec, the first station to the east, and walking thence across fields to the south we climb to the summit of the Sierra some five miles distant from the station and about 2000 feet above it. Here we collect 3945-

Festuca amplissima, Rupr.

Arracacia atropurpurea ³⁹⁴⁷ B. & G.

³⁹⁴⁸ *Lippia umbellata*, Cav.

and secure more flowers and roots of *Blitum*

We descend to take the return train at 4.34 P.M.

The slopes and summits of these mountains are well wooded chiefly with oaks and pines.

The former include

Quercus grisea, Liebm.

Q. Grahamei, ?

Q. calophylla, Ch. Sclaud

Q. reticulata, HBK.

Here the latter grows to large size — I saw specimens three or four feet in diameter and 75 to 100 feet high — and is much cut for railroad ties (36 each) for the making of carts, and for other uses. It is called "roble", and its timber is considered the best of the oaks and the most durable. It is coarse-grained, however, and cracks much in drying.

24, Nov.

Judd and I jump from the train at Casa Blanca some two miles west of Chapultepec station, a point nearer than some mountains, but we do not today

mount high into the mountains. Occasional light showers hinder us but little; so we collect for sets.

³⁹⁴⁶
Salvia richocana, Hornem.
³⁹³⁷
Ruellia lanceolata, Benth.
³⁹⁵²
Calamintha macrostemma, DC.

We again take the home-bound train.

25, Nov.

As we must stay about our room today to dry plants, I return alone to the base of the mountain, stepping off the train as it is passing the Casa Blanca, and coll. ³⁹⁴⁴
Muhlenbergia brevifolia, Horn.
³⁹⁵³
Encoreta calophylla, Ch. & Sch.

The weather is fair again.

26, Nov.

Today we both leave the train as before, and passing up a long cañon

by a wood road, get at the farther and higher base of the loftiest peak of the mountains, and climb to its summit. Here we find little of interest; but on a smaller knob just east of this we collect two ³⁹⁴⁰
Rumfordia floribunda, DC.
³⁹⁴²
Eupatorium longipes, Gray.

Then, the time for returning to the train having arrived, — 2.30 P.M. — we descend abruptly to the wood road through a dreadful jungle of *Ceanothus agrestis*.

27, Nov.

Judd has to work about our room, but I walk to the island hill three miles east of the hotel and wander over it searching for specimens of ³⁹⁵²
Gentiana spathacea, HBK.

but fail to find anywhere
more than thirty four
specimens.

In the evening we
pack our trunks at the
station.

28, Nov.

Regretfully we take
leave of the pleasant
fertile Patzcuaro country
but with the purpose of
returning again before
the close of the year, if
possible in order to secure
a number of plants left
on the mountains in
too young condition for
collecting.

Arrived at Acambaro
at 3:20 P.M. we find
no good place for
waiting till the through
train shall come
along at 1:30 A.M.
so we go by San Miguel

train as far as Clays,
and there at 6:30
P.M. we spread our
bed on the spacious
platform as so many
times before and
pass in slumber
most of the time till
3:40 A.M. when we
board the train.

29, Nov.

Arrived in San
Luis on time - 10:15-
A.M. - we have three
or four hours to care
for our plants before
going to church to
hear Mr. Beall
preach a grand Thanksgiving
giving sermon.

30, Nov.

We devote the day to
caring for our plants and
resting.

3975 *Lycopodium dichotomum*, L.

1, Dec.

About 9.15 A.M. we jump off the Tampico train as it passes through the coffee plantation of Tamasopo, and find the water fall and natural bridge about a half mile from the railroad track.

Hereabouts we gather
³⁹⁵⁸*Asplenium Shepherdii* Sprng.
³⁹⁶⁰*Adiantum trapeziforme*, L.

In the deep cañon dark with a heavy tropical forest night comes down early, and we make our bed in a smooth spot upon a natural bridge. At first the night is cloudy and warm, but towards morning the stars are seen through the treetops. Covered with our rubbers only, we keep warm enough and sleep soundly to the music of a waterfall just above the

bridge. In rock chambers behind the falling water numerous periwinkles chattered through out the night and over we were awakened by the snore of tigers & Dec - prowling near by.

By 6.00 A.M. day has returned, and we are afoot, and collecting by the river, in the coffee plantation, and on the mountain side above
Aspidium filiforme, Klotz.³⁹⁵⁷
Phlegmaria tetraspora Mett.³⁹⁵⁸
Lycopodium dichotomum, L.³⁹⁷⁶
Chorizanthe magnoliaefolia, Dec?³⁹⁶⁹
Cephaelis filicula, Sch. Bip.³⁹⁵⁶
and are at Hoya Zacate station on the mountain ready for the train when it arrives there about 3.00 P.M.
On the train I make the acquaintance of Mr. Harrison of Tampico and Silas -

3, Dec.

Warm sunshine enabled us to dry our plants, so we could leave them for another trip.

4, Dec.

We jumped from the Tampico train when it was about two miles beyond Las Canoas station, and spent the day on the mountain side collecting *Spharalea umbellata*³⁹⁶⁶ *Chamaedorea*³⁹⁶⁸ station, Mex.

We had brought a pair of woollen blankets as well as rubber blankets, and with these we made our bed under the great cypress trees, the deep layer of dry cypress leaves affording us an elastic mattress. The night was warm by reason of clouds covering the earth throughout most of the night.

5, Dec.

On the limestone ledges near the station we collected two species

of *Amaranthaceae*:

Eragrostis interrupta, Kunth.

*Distichlis*³⁹⁶¹ *canescens*, H. & P.

Then returning to the rich woods, where we worked the previous day, we gathered ferns — for sets

*Asplenium*³⁹⁶⁸ *erectum*, Koenig, var. *proliferum*, Hook.

The train returned about 5.00 P.M., or an hour late.

6, Dec.

We leave in San Luis tolerably good weather for drying plants.

We hear a good sermon by Mr. Winton.

And at 4.30 P.M. go to the Bull ring to see a female "picador a caballo" — a lady equestrian performing in the ring and thrusting darts into the charging bull from her saddle.

7, Dec.

A day with cool winds and sky mostly overcast, but we manage to change our dryers.

8, Dec.

Mr. Winton accompanying us on our 27th trip over the Tampico road, he and Judd on a hunt—they are let off the train some three or four miles short of Micos while I alight at the station of Micos and collect for sets.

Erycinia Schiediana ³⁹⁶⁶ Schl.

After nightfall Mr. Winton and Judd come in each bringing a deer slung over his back.

We spread our bed in the freight house

and pass a comfortable night.

9, Dec.

We are early astir, and Judd goes back to the open meadows and palm groves in a vain hunt for more deer, while Mr. Winton goes with me to the cascades of the river, where he shoots three large birds, and I coll.

Erigeron heteromorphus ³⁹⁶² Rob. n. sp.

Ficus Bonplandiana ³⁹⁷⁷ Mig.

By midday ^{enip. with all} we are on our way back to San Luis.

10, Dec.

The sun warms through the clouds a little, enabling us to change our dryers once or twice.

Pteris quadrifaria, Peters ³⁹⁷¹

11, Dec.

Out on our 28th trip on the Tampico road we alight from the train at Hoya Zacate station and then walk down to the coffee plantation, where we collect *Polypodium* ³⁹⁷⁴ *pectinatum*, L.
³⁹⁷⁰ *Mimosa albica*, H. & B.

And at dark spread our bed again on the natural bridge. Rain begins about 11.00 P.M., and continues some three hours, but under our rubbers we sleep warm and dry.

12, Dec.

During the day the sky was obscured by clouds but this did not prevent the weather being uncom-
fortably warm.

We gathered for sets

3979

Banara Mexicana, Gray - and then walked to Tamasopo tank to take the homeward train, on the way neither stopping to collect.

Hemionitis ³⁹⁷² *palmata*, L.

As we left the region and looked back upon it from the hills of Canova, clouds were threatening another rainy night. In San Luis at midnight we found slight showers had fallen even there.

13, Dec -

We succeed in changing our dryers during the forenoon. In the afternoon showers fall. We go out to hear Mr. Winton preach and afterwards go home with Mr. Grimen.

14, Dec.

The wind blows from the west and clears away the clouds, so the sun shines out by nine o'clock - We apply ourselves closely to drying our plants.

15, Dec.

Out on our 29th trip and last of the season on the Tampico road we leave the train at Hoya Zacate Station.

In the vicinity of the station we collect *Conostegia Xalapensis*, ³⁹⁷⁶ Son. and on our way down to Tampico tank we complete our set of ³⁹⁶⁷ *Trichilia spondioides*, Sz.

Thence Judd goes on to a large meadow amidst the wooded hills and the lowland forests, the haunt of

deer and turkeys, and I follow the railroad for two or three miles to gather fruiting specimens of *Mimosa flagellata* Willd. ³⁹⁷⁰ Judd comes in empty-handed, though he has seen deer.

We decline the pump man's kind hospitality - the offer of a sleeping place on the floor of his little house - from fear of fleas, and such, and make our bed on the river bank.

We sleep tolerably warm and dry, though the night proves rainy.

16, Dec.

Judd returns to the meadow to hunt as early as possible, while I botanize about the borders of a nearer and smaller meadow gathering a fuller supply

of *Homionitis palmata*, L.,
and a lot of ³⁹⁷⁸
Loranthus crassipis, Oliv.

It rains most of the time, and within our rubber coats our clothing becomes saturated with perspiration, while our feet become soaked with water.

Judd comes in a little before train time (2.20 PM) bringing a young stag, having shot a large one ^{also} which he had not time to find in the bushes, and having seen a score of deer.

When the train mounts into the colder air of the tableland our discomfort from cold and wet increases. We must not fall asleep during the evening, as has been our wont. The rain increases, and covers the plain about San Luis

with a sheet of water, and when we arrive in the city at midnight, we find that its streets have been flowing with streams.

We hurry to bed to get warm, and awake all right at daybreak.

17, Dec.

Before the forenoon is past, the sun has dispelled the clouds and warmed the air, so as to afford us a good opportunity to dry plants.

The summits of the San Miguelito Mts. fifteen miles to the south of the city are seen whitened by snow.

18, Dec.

Fog and mist and cold return and make a dismal day.

About 5.00 P.M. we take the south-bound train on the Mex. National to make another trip to the Patzcuaro country.

Mr. Jony comes with us by invitation -

19, Dec.

From Acautaro (3.45 A.M.) to Patzcuaro (5.10 P.M.) By midday we meet rain coming up from the Pacific.

Put up in our old room in Hotel Ibarra.

Perizia thyrsoidea Gray ³⁹⁸⁵

20, Dec.

We walk along the railroad for five miles and thence ascend into the mountains, where we collect for sets.

Perizia Michocana, Rob. n.sp. ³⁹⁸⁸
Verbesina Keatingii, Rob. ³⁹⁸⁹
Gleichenia n.sp.

A misty day, but we manage to keep tolerably dry.

We take the train home from Chapultic station.

21, Dec.

We jump from the train at Casa Blanca, and climb to the summit of the Sierra, where we collect for sets.

Lupinus elegans, DC. ³⁹⁸⁶
Coum ³⁹⁸⁷
Capitatorium tubiflorum, Benth. ³⁹⁸⁸
Trisetum Virletii, Fourn. ³⁹⁸⁹

after collecting near the base of *Gerardia spathacea*, HBK. ³⁹⁹⁰

The sky has cleared, and we have a lovely day. ³⁹⁹¹

We return as before.

22, Dec.

Judd stays at our hotel to improve a fine day for drying plants, while I walk back to

the mountains and collect
Garrig³⁹⁸⁹ia laurifolia, Benth.
Salvia³⁹⁸¹ elegans, Dahl.
returning by train from
Chapultepec.

23, Dec

We bid good bye to
the fruitful Patzcuaro
region in the dim light
of a foggy morning,
welcome the sunrise
when we enter the dryer
air near Morelia,
pass Acambaro about
4:00 P.M., make our
bed on the freight-house
platform at San Miguel
till the coming of the
through-train and
24 Dec.

Reach San Luis Po-
tosi shortly after 10.00
A.M.

Our trunk did not
come on with us, not

having been put aboard
our train at San Miguel.

We applied ourselves
closely to the drying of
our plants, hindered
somewhat by a high cold
wind.

25, Dec.

Today our trunk ar-
rives full of green plants
and we work over them
assiduously, till we go
out to eat Christmas
dinner with the Grimes.

A dry sunny and warm
day.

26, Dec.

We finish the drying
of our plants, then pack
up our dryers, bed and
other things and place
them in a storeroom
of Mr. Grimes.

27, Dec.

At 10.40 A.M. we
bid good bye to San Luis
and our many kind friends
there and take the north-
bound train homeward
bound. The weather is
bright and serene, as our
train rocks over the plains
towards Saltville.

28, Dec.

I have the good fortune
to get my business in
Laredo accomplished, the
business at the post office
and the packing and
shipping of a box of plants
for home - in good time
to take the train for St.
Louis at 11.05 A.M.

The day is sunny and
warm, as we go northward.
The vegetation is at this
season mostly dry and
dormant, but certain

perennial plants are springing
up here and there to herald
the returning spring, and certain
that were excluded, warm
and moist were getting
green with young grass. But
a few weeks more.

Tropic of Cancer:
12 telegraph poles north
of White post 784 -

Expenses of L. A. Holt-	
Fare Montevideo to Ch.	2 05-
Charlotte - Laredo	37 65-
Expenses	4 35-
"	1 00
Fare Laredo - Schenley	46 60
Cash put in hand	20 00
Telegram	75-
Cash advanced	31-50
	<u>143 90</u>
Cash returned	101 00
	<u>\$138.90</u>

Last number of Fl. Mex.
3689, 3734, 3989

Shipped box containing
herbarium for Inst. Med.
Walt to Laredo, 28, April -
Contents of box 15-cubic feet
weight of contents 254 lb.

Due.

Rudolf Weigel, Leipzig	188th
J. G. Baker, New (Paid)	23 00
Ferd. von Mueller	23 00
Wm. Wittrock (Paid)	40 00
J. Bayley Walfour (Paid)	70 00
Wm. Barbey (Paid)	23 00
Wm. Carruthers	23 00
John M. Coulter (Paid)	75 00
S. P. Penhallow	23 00
David Bain	23 00
C. C. Melcor	23 00

January

Charlotte - Ludlow R.	4	20
Meals		50
Postage		50
Ch - Windsor R.	7	00
Meals		50
30 Freight to Elk Paso	2	53
7 Storage on wagon	65	00

February

2 Box lumber	6	55
3 Grind on drawing plant	1	75
4 Postage		92
5 -		37
23 -		2 94
Nails 17, paper 20		27

March.

3	Postage	61
	Arin loan	25-
6	Postage	33
9	"	1 11
"	Garn, etc.	1 10
15	Repairs to shoes	1 75-
18	Truss	3 50
19	Blanket-poncho	3 50
23	Shoes	4 00
"	Shraps	2 25-
"	Postage	34
26	Envelopes	54
30	Postage	4 80
	Dr. Shaw	50

April

7	Postage	75-
	Gumms covers	10 00
"	Expressage	1 75-
9	Envelopes	54
18	Diary, paper, pencils	95-
	Repairs to watch	1 75-
	Suit-clothes	15 50
	Rubber coat	4 50
	Rubber blankets	2 50
	Blouse 4.; hat 1.	5-00
	Shirting	1 92
	June 35-; lunch, 50	85-
	J. A. Williams to cash	11 84
20	Cloth, etc.	64
21	Repairing clothes	75-
24	Middlebury & Co.	1 10
28	Postage	47
	Sundries	1 50
29	Wandolph & Co.	4 25
30	J. A. Williams, cash,	1 00
	" " " "	1 00

May-

5-2 Charlotte-Carids	75-30	20 Food, fruit, etc.,	77
6 Book	25	21 Food, etc.,	79
7 Photo. glass, St. Louis,	2 50	22 Food, etc., 39-	39
Hotel, O'Neill,	1 00	23 Food, etc.,	30
Fruit-	35-	Repair to hat	1 25-
9 Food	30	25- Food	70
Baggage excess	6 35-	26 Food, etc.,	61
10 Food	30	27 Food & fruit	67
11 Food	25-	28 Food, etc.,	56
12 Cargadores	1 25-	29 Food, 68+10=	78
Meals	1 25	30 Food Me., 10+12=	22
Broom	37	31 Fruit-	<u>06</u>
13 Food & fruit	88		
14 Food	52		
15 Food 18+26 =	44		
16 Food	57		
Postage stamps	1 00		
17 Food 44, fruit 25-	79		
Cargadores	50		
18 Food & fruit 23-	72		
19 Hotel Silao	1 50		
Food 25-+12	37		
Fruit-	1 36		
Cargadores	70		

June-

- 1 Food & fruit $.72 + 0 = .72$
 2 Food, etc., $.62 + .37 = 1.00$
 Cargadores .82
 Riv. J. Howland 3.00
 3 Food $.18 + .52 = .70$
 4 Food $.70 + .82 = 1.52$
 Room rent (one night) 6.00
 Mailing 75
 Cargadores 1.00
 7 Food & Ceyan 20
 Food $.55 + .56 = 1.11$
 Church cont. 25
 8 Food $.50 + .15 + .50 = 1.15$
 10 Food & Ceyan 10
 Fruit .06
 11 Food $.75 + 1.03 = 1.78$
 13 Fruit $.18 + .10 = .28$
 14 Food, etc., 1.16
 15 Food $.50 + 1.18 = 1.68$
 17 Food & Ceyan 10
 18 Food 1.74
 21 OK. 10
 Food 1.00
 22 Food $.62 + 1.28 = 1.90$
 OK. 10

- 25- OK 10
 Food 1.86
 28 OK 10
 Food 1.06
 29 Food $.75 + 1.06 = 1.81$
 30 Food $.11 + 1.2 = 2.3$
 24 Lister A. Holt began.
 Fare Monterrey - Ch. 2.05
 24 (To Cash advanced 31.50)
 29 Fare Ch. - Laredo 37.65
 Expenses 4.35

Cash paid out for Lister
 A. Holt - exclusive of
 meals, in Mexico and
 Laredo, \$133.65 - U.S.

July.

1	Food .35-	35-
2	Fruit	18
3	Food .72-	72
	Cargadores	68
4	Carter	25
	Meals	21-
	Bridges tolls	30
5	Meals + fruit, etc.,	2 00
6	Meals + fruit + 70+	3 50
	Fright Ch. - Laredo	6 20
	" Laredo - Ch.	4 95
	Carter .75 + 15 =	90
	Express to St. Louis	1 65
	Hotel room	4 00
	Postage 34; envelopes 10 =	44
	(3) Telegram to E. Brainerd	75-
	Customs papers	3 60
7	Cargadores	1 50
	Customs scoundrel	5 00
	Food	40
8	Food 1.57 =	1 57
(5)	J.A. Williams to	1 40
	Postage	30
9	Food	1 57
12	Food 1.57 + 50 =	1 57
	S.K.	20

12	Church conts	35-
13	Food .86 + 1.50 =	2 36
	Sacks 26.	
	L.A. Holt to Cash	1 00
14	Trunks	06
15	Trunks	06
16	Food	1 45
	S.K.	10
17	Food	22
18	Food	17
19	S.K.	10
	Food 1.19 + 25 =	1 44
20	Food .65 + 1.17 =	1 82
21	Food	43
23	Food 1.42 + 83 =	2 25
	S.K.	20
26	S.K.	10
	Food	54
27	Food 1.20 + 54 =	1 64
	S.K.	10
28	Fruit	10
29	Fruit	10
	S.K.	10
30	Food 1.53 + 62 =	2 15
31	Food	25

August.

1	Food	20
	Sk.	10
2	Food $.77 + .26 =$	1 03
3	Food $.64 + .70 + .25 =$	1 59
4	Food	20
5	Food, etc.	30
6	Food $.75 + 1.50 =$	2 25
8	Fruit, etc.	31
9	Food $.81 + 10 =$	91
10	Food $.30 +$	
	Caryadorn	50
	Room rent	6 00
11	Food $.60 +$	60
	Carters	50
	Freight to Ch.	8 25
	" To St. Louis	1 45
12	Box $.50 + 10 =$	60
	Iron	40
12	Meals $.50 + 50$	1 00
	Hotel room	1 00
	Food $.40 +$	
	Books	30
	Food $.57 + 68 =$	1 25
10-13	Food, L. A. H.,	75

15	Food	31
16	Food $.80 =$	80
17	Food $1.02 + 35 =$	1 37
19	Food	53
20	Food $1.70 =$	1 70
	Sk.	10
22	Food	63
23	Food	85
24	Food $.50 + 66 =$	1 16
	Caryadorn	26
25	Lardo - Sch (L. A. H.)	46.60
	Sch - Moritoun (4)	20.00
	Telegram (")	75
	Meals	75
	Food	340
	Room	50
26	Food	76
27	Food	1 00
29	Fruit	05
	Sk.	10
	Charity	2 24
30	Food $.22 + 68 =$	90
31	Food $.60 + 10 =$	66
	Caryadorn	50

September -

1	Fruit	09	11	Food	72
	Bagge transfer	1 25-	12	Food	79
2	Meals	1 50	14	Food	71
	Cargadores	1 25-	15	Food	76
	Cathedral towers	25-	16	Food $.68 + 20 =$	88
3	Meals $.42 + 1.10 =$	1 52	17	Food	69
	Cargadores	1 25-	18	Food $.49 +$	82
4	Meals $.81 + 5.0 =$	1 31	19	Food	68
5	Meals $.50 + 1.2 =$	62	20	Food	19
	Mex. help coll.	1 75-	21	Food	28
	Hotel room	7 50	22	Food $.57 + .17 =$	74
	Street car	25-		Paper & cutting (1.12)	1 62
6	Food $.25 + .30 + 6 =$	61	23	Food	66
	Hotel Buena Vista	1 00	24	Food, etc.,	92
7	Food $.54 +$	54	25	Food	56
	Room	.80	26	Food	68
8	Food	34	27	Food	18
	Cargadores	87	28	Food	87
	Room rent till 5, Nov. 10 00		29	Food	78
9	Food	1 00	30	Food & fare	20
	Cargador	50	(28)	Paper & cutting	1 62
	Post cards	50			
10	Food 28-				
	Strawberries	1 12			
	Cargadores	1 00			

October-

1	Meals, etc.	90
2	Food	85
	Paper & cutting	1 62
	Car fare	37
3	Food	68
4	Food	16
5	Food	57
6	Food $.59 + 12 =$	71
	Car fare	50
	Obtain Medicine	18
7	Food	58
	Car fares	24
8	Food	82
	Car fares	12
9	Food	79
10	Food	61
12	Food	67
13	Food $.46 + 25 =$	71
	Cargadores	75
	Oil Syriaco	1 00
14	Food $.15 + 49 =$	64
	Cargadores	1 03
15	Food $.72 + 20 =$	92
18	Food	1 25
19	Food $57 =$	57

20	Food $.10 + 20 =$	30
	Cargador	50
21	Food	16
22	Meals (El Paso)	1 15
	Carters	50
	Freight El Paso - Ch. 6	95
23	Meals $.50$; food $270 = 3$	20
	Books	70
	Medicine	75
	Postage Ch. P.	1 00
	" B.M.H.	61
	Hair cutting	35
	Room	1 00
	Box 1.50 ; iron $.25 =$	1 85
24	Storage on wagon	33 00
	Freight Ch. - SLP	27 65
	Hauling	1 00
	Street car fares	48
	Room	75
25	Food	20
26	Food $.20 + 20$	40
	Hotel Zacation	3 00
27	Food $.12 + 23 =$	35
28	{ Cargadores	1 00
	{ Food $.88 + 31 =$	1 19
29	Food $.96 + 44 =$	1 60
31	{ Help cutting palms	1 50
	{ Food	35

November

1	Food	$.77 + 20 =$	97
2	Food	$.75 + 1.00 =$	1 75
3	Help getting Blotie		50
4	Food		25-
5	Caryador		75-
	Food	$.45 + 46 =$	91
6	Food	$.28 -$	
7	Fright to short hills, 6		75-
	Carton		50
	Food		90
	Cheese		1 85-
	Box + Mail		60
8	Food		22
9	Food	$1.66 + 6$	1 72
	Room rent		10 00
	Caryador		25-
10	Help getting orchids		50
11	Food	$.16 =$	16
12	Food	$1.25 -$	
	Caryador		25-
13	Food		24
14	Food	$1.90 =$	1 90
	Carton 50, box, etc.		1 05-
	Fright to short hills		2 25-

14	Food	$.31 + 18 =$	49
	Caryador		25-
15	Food	$.68 =$	68
16	Food	$1.00 + 25 =$	1 25-
	Charity		25-
	Caryador		25-
17	Food	$.20 + 70 =$	27
18	Food	$.16 + \text{help } 1.13 =$	1 29
19	Food	$.41, \text{help } 3.50 =$	3 91
20	Food	$.50, \text{help } 3.50 =$	4 00
21	Food	$.25, \text{help } 4.75 =$	5 00
22	Food	$.30 + .09 =$	39
23	Food	$.20, \text{help } 1.25 =$	1 45-
24	Food	$.40 + 14 =$	54
	Help [Total \$15.18]		1 00
25	Food	$.50$	50
26	Food		33
	Bulbs, (C.G.P.)		5-50
27	Food	$1.25 -$	1 25-
28	Food	$.16 + 31 =$	47
	Room 11 days		11 00
	Bulbs, (C.G.P.)		2 50
29	Food	$.45 -$	
	Caryadores		50
30	Food		1 50

3, Dec.	
Food 1.62-	
5 Fruit	12
6 Food 1.15-403	1 18
Bull fight	5-0
7 Food 1.37=	1 37
8 Fruit	12
9 Food	18
10 Food 1.50=	1 50
12 Oranges	10
13 Food 1.55=	1 55-
14 Food	1 05-
17 Food	1 62
18 Food .56+23=	79
Cargador	25-
19 Fruit	23
20 Food	58
21 Food	25-
22 Food .36-	3 6
Milla bulbs	4 87
Hotel Barra	4 00
23 Food	5-0
Express on gun	40
24 Food	48
25 Food .65+75=	80
26 Food .30+42=	72

26 Carter	42
27 Food .24+3=	37
Cargador	1 00
Baggage express	3 99
28 Carter	75-
Iron	20
Boxes	60
Fright to Ch.	5-09
2 tickets to Bush.	1 08 60
Fruit	10
29 Food	25-
30 Food .50=	50
Book .25	25-
31 Food .60+53=	1 15-
Book.	30
Hack	25-
Jan. 1, Hotel, Malone,	5 00
dinner	25-
4 Postage	1 18
<hr/>	
Balanced due J. A. Williams	
Acct-balanced } #191.75-	
30 May, 1892. }	20.00
<hr/>	
13 J. A. Taggart	12 50
12 Feb, 1892 J. E. Torrey, Jr.,	6 30

Expense of collection

Fares, food, etc., 458.32

Help of J. A. W. 200.00

658.32 13

Expense of L. A. H. 133.65

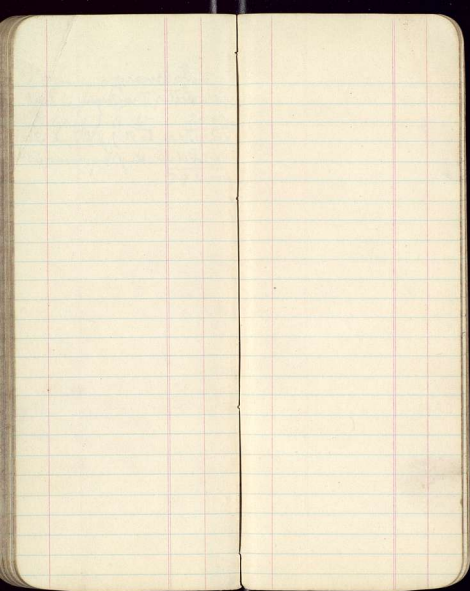
792.00

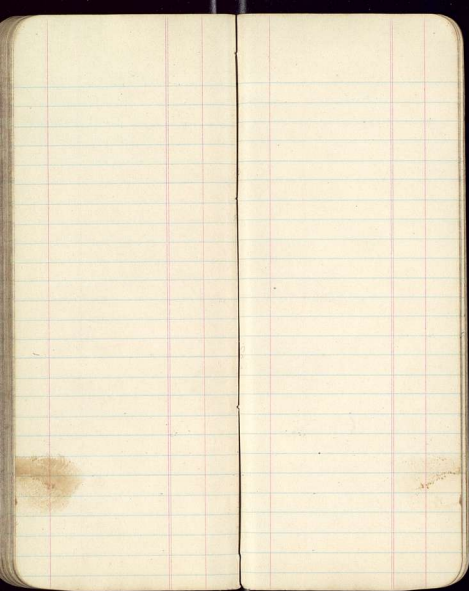
February

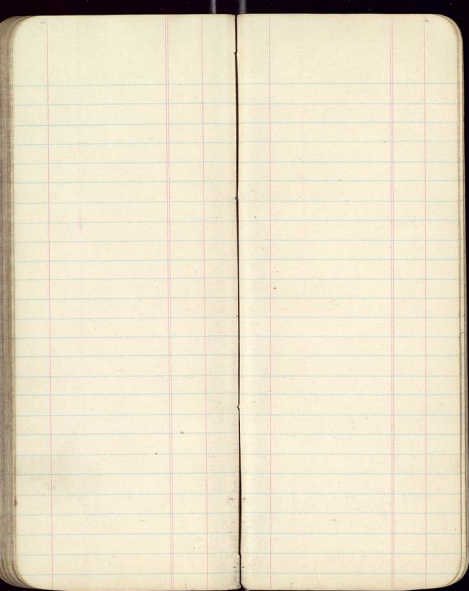
Letter envelopes 1 68

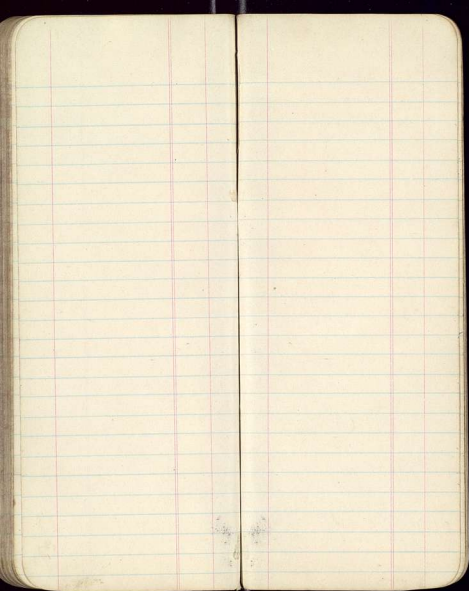
Fare to N.Y., J. C. T. 6 30

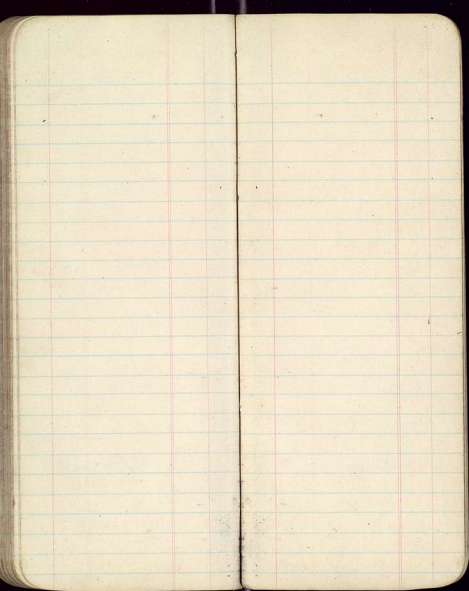
Telegram from " 25-

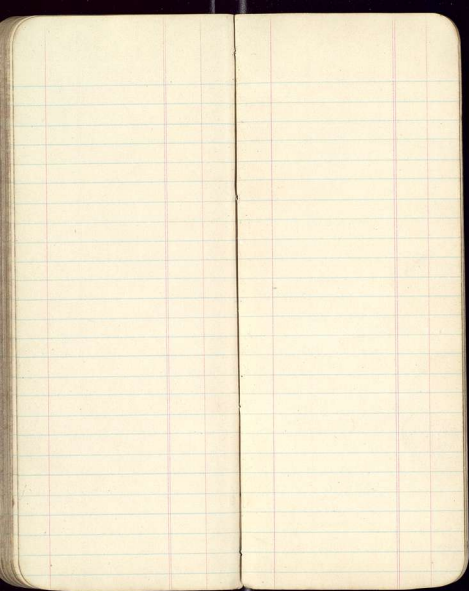


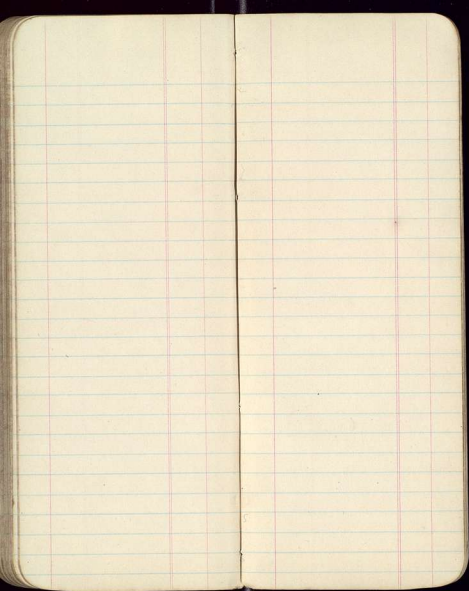


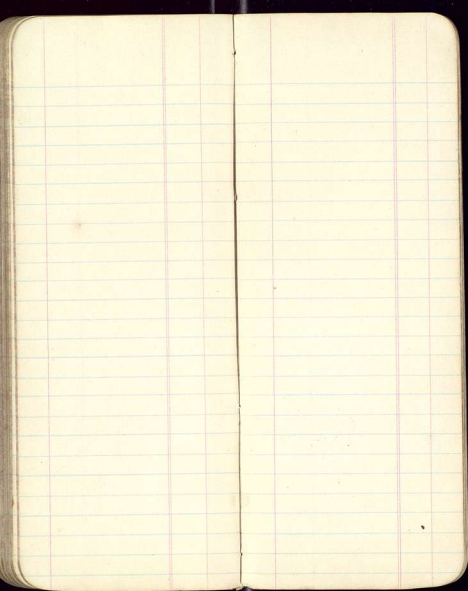


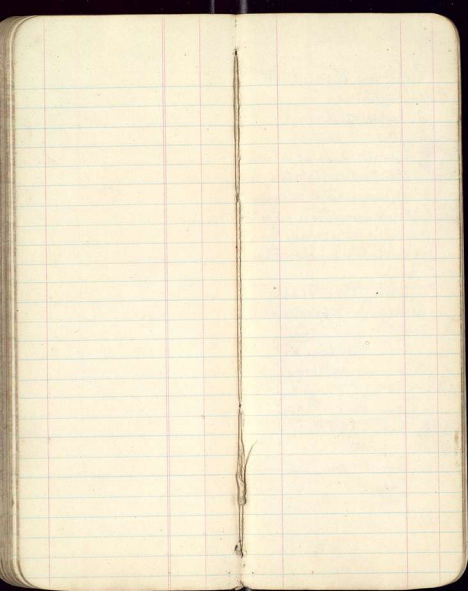












Left in store with
Mr. Grimes

- 3 bales of dryers
- 2 " paper
- 1 trunk full of utensils
etc., including six sets
of wires and straps,
- 1 double mattress + 3 pillows
- 1 single mattress
- 2 picks (in double mattress)
- 1 tent;

With Mr. Brall
camera + tripod + plates;

With Mr. Winton
Rifle + cartridges.

San Luis Potosi
26, Dec., 1891-

Cenisa
Cocónostes

Green with a purplish
tinge; The rind thick hard
and sour; sub purple
with very little pulp.

Manuel Garcia
San Luis Potosi

Pantaloons
Leg 27; waist 33.

J. A. Robertson Esq.,
Genl Manager Monterey
• Gulf View.
Monterey,
Mexico -

Calio W. Loring,
Rearly, Mass.

C. W. + A. P. Loring,
22 Congress St.,
Boston.

Levi P. Wade
(Mason Building)
70 Kilby St.,
P. O. Box 2818, Boston.

Prof S. P. Langley,
C. Brown Goode, Esq.,
Smithsonian Institution
Washington, D.C.

Garden & Forest Publishing Co.
W. A. Miles,
Tribune Building,
New York.

W. J. Palmer, Esq.,
Pres. Mex. Natl Construction Co.,
32 Nassau St.,
New York.

Rev. G. B. Marsh,
Monterey.

Rev. G. B. Linton,
San Luis Potosi.

Rev. J. G. Kilgore,
Chihuahua.

Rev. Samuel P. Carver,
3rd San Antonio N^o 87,
Guatemala.

Rev. J. W. Grimes,
San Luis Potosi.

Rev. M. E. Beall,
San Luis Potosi.

Rev. A. H. Sutherland,
Mexico.

Rev. W. J. Powell
Saltillo,
Mexico.

Rev. J. H. Mosley,
Madero Instituto.

Botanical Laboratory
1924 Washington St.
St. Louis -

W. W. Cookins,
1447 California Ave.,
Chicago -

Clinton Fullington,
C/o J. W. Butler & Co.
153-157 Monroe St.
Chicago -

H. A. Hyatt, Photo. Supply,
N. E. Corner Locust & 8th St.
St. Louis, Mo.

J. C. Martinale,
322 Penn St.,
Camden, N. J.

Recher & Co.
Haarlem, Netherlands

Wm. Brockway
Graduate Library

Mrs. L. M. Piper
C/o C. T. Piper,
Rockland, Mass.

Frank Stephens,
Santa Ysabel,
San Diego Co.,
California -

St. H. H. Ruby,
169 Prospect Ave.,
Newark, N. J.

St. J. F. Allen,
10, East 36th St.,
New York -

Prof. L. M. Underwood,
Syracuse, N. Y.

Walter A. Evans,
C/o Eli Lilly & Co.,
Indianapolis, Ind.

Gro. E. Sargent
C/o Dudley St. Medford
Mass.

Dr. Don Celso G. Rodriguez,
Las Canoas -

Paul Maury,
Botanist of Dept. Commission
of Exploration.

José Serrano,
Juan Blanco, (guide)
Zapotlan

S. A. Holt,
Randolph,
Vermont

W. H. Inborden,
Vick Univ.
Nashville, Tenn.

L. J. Hileland,
- 806 Pine St.,
Macon, Ga.
(Mr. Bell of Lynn, N.C.)

Will S. Reynolds
Ep Loren Priest
Andover,
Vermont.

David Starr Jordan
Leland Stanford
Univ. (Pres.)

